

SUPPLEMENT TO  
AMERICAN JOURNAL  
OF  
ARCHAEOLOGY



INDEX TO VOLUME XLIX

SUPPLEMENT TO  
THE JOURNAL OF  
THE ARCHAEOLOGICAL INSTITUTE OF AMERICA  
PUBLISHED QUARTERLY BY THE INSTITUTE  
VOLUME XLIX  
1945

Printed by The Rumford Press, Concord, N. H.

BOSTON UNIVERSITY  
COLLEGE OF LIBERAL ARTS  
LIBRARY



Gift of Professor William Auerho  
Bound Aug. 1946

## EDITORIAL BOARD

MARY HAMILTON SWINDLER, Bryn Mawr College, *Editor-in-Chief*  
STEPHEN B. LUCE, Fogg Museum, Cambridge, Mass., *Editor, News and Discussions*  
HELEN E. SEARLS, Bryn Mawr, Pa., *Assistant Editor, Book Reviews* (March, June)

## ADVISORY BOARD OF ASSOCIATE EDITORS

WILLIAM F. ALBRIGHT, Johns Hopkins University (*Oriental*)  
CARL W. BLEGEN, University of Cincinnati (*Aegean*)  
AGNES BALDWIN BRETT, Numismatic Society, New York (*Numismatics*)  
GEORGE H. CHASE, Harvard University (*American School at Athens*)  
JOHN F. DANIEL, The University Museum, Phila. (*Aegean Archaeology*)  
WILLIAM B. DINSMOOR, Columbia University (*Greek Archaeology: Architecture*)  
STERLING DOW, Harvard University (*History*)  
GEORGE W. ELDERKIN, Princeton University (*Editor, 1924-1931*)  
HETTY GOLDMAN, Institute for Advanced Study, Princeton, N. J. (*New Excavations and Discoveries*)  
BENJAMIN D. MERITT, Institute for Advanced Study (*Epigraphy*)  
CHARLES RUFUS MOREY, Princeton University (*Mediaeval*)  
GISELA M. A. RICHTER, Metropolitan Museum of Art, New York (*Greek Archaeology: Sculpture*)  
DAVID M. ROBINSON, Johns Hopkins University (*Bibliography, General*)  
MICHAEL I. ROSTOVITZ, Yale University (*Roman*)  
FREDERICK O. WAAGÉ, Cornell University (*Hellenistic, Roman*)  
CAROLINE RANSOM WILLIAMS, Toledo, Ohio (*Egyptian Archaeology*)

## HONORARY EDITORS

WILLIAM B. DINSMOOR, Columbia University (*President of the Institute*)  
LOUIS E. LORD, Oberlin College (*Chairman of the Managing Committee of the School at Athens*)  
MILLAR BURROWS, Yale University (*President of the American Schools of Oriental Research*)



P-CC  
E85  
SER. 2  
V. 49

22

## ARCHAEOLOGICAL NEWS AND DISCUSSIONS

### ADVISORY BOARD

- Egypt*—DOWS DUNHAM, Museum of Fine Arts, Boston  
*Orient. Western Asia*—WILLIAM F. ALBRIGHT, Johns Hopkins University  
*Far East*—BENJAMIN ROWLAND, Fogg Museum of Art, Harvard University  
*Greece. Prehistoric*—G. E. MYLONAS, Washington University, St. Louis  
*Greek and Roman Sculpture*—MARGARETE BIEBER, Columbia University  
*Painting and Vases*—GEORGE H. CHASE, Harvard University  
*Epigraphy*—BENJAMIN D. MERITT, Institute for Advanced Study  
*Architecture*—RICHARD STILLWELL, Princeton University  
*Rome. Architecture and Painting*—CLARK HOPKINS, University of Michigan  
*Slavic Archaeology*—CLARENCE A. MANNING, Columbia University  
*American Archaeology*—HERBERT F. SPINDEN, Brooklyn Museum  
*Mediaeval Art*—CHARLES R. MOREY, Princeton University  
*Bibliography, General*—DAVID M. ROBINSON, Johns Hopkins University

### CONTRIBUTING EDITORS

- Classical Archaeology*—CEDRIC BOULTER, University of Cincinnati (Vases)  
AGNES BALDWIN BRETT, American Numismatic Society (Numismatics)  
JOHN L. CASKEY, University of Cincinnati (General)  
ROBERT E. DENGLE, Pennsylvania State College (General)  
STERLING DOW, Harvard University (Epigraphy)  
WILHELMINA VANINGEN ELARTH, Wheaton College (Vases)  
HAROLD N. FOWLER, Washington, D. C. (General)  
SARAH E. FREEMAN, Johns Hopkins University (Vases)  
HAZEL HANSEN, Stanford University (Prehistoric Greece)  
J. PENROSE HARLAND, University of North Carolina (Prehistoric Greece)  
P. L. MACKENDRICK, Phillips Andover Academy (Epigraphy)  
MARY ZELIA PEASE, Bryn Mawr, Pa. (Vases)  
LUCY T. SHOE, Mount Holyoke College (Architecture)  
H. R. W. SMITH, University of California (Vases)  
FRANCIS R. WALTON, Williams College (Epigraphy)  
SHIRLEY H. WEBER, Gennadius Library, Athens (Numismatics)
- Oriental Archaeology*—JOHN W. FLIGHT, Haverford College  
HENRY S. GEHMAN, Princeton Theological Seminary  
CYRUS H. GORDON, Princeton, N. J.  
FRED V. WINNETT, University of Toronto
- Roman Archaeology*—ELIZABETH C. EVANS, Wheaton College  
GEORGE M. A. HANFMANN, Harvard University (Etruscan)  
W. C. McDERMOTT, University of Pennsylvania  
ROBERT S. ROGERS, Duke University  
KENNETH SCOTT, Western Reserve University  
MERIWETHER STUART, Hunter College  
LOUIS C. WEST, Princeton, N. J.
- American Archaeology*—WENDELL BENNETT, American Museum of Natural History  
*U.S.S.R.*—HENRY FIELD, Field Museum of Natural History  
EUGENE PROSTOV, Iowa State College
- Christian*—FRANKLIN B. KRAUSS, Pennsylvania State College  
*Mediaeval and Renaissance*—EMERSON H. SWIFT, Columbia University  
FRANCIS J. TSCHAN, Pennsylvania State University



**THE JOURNAL OF  
THE ARCHAEOLOGICAL INSTITUTE OF AMERICA**



## CONTENTS

|   | PAGE              |
|---|-------------------|
| AMYX, D. A.   |                   |
| A New Pelike by the Geras Painter . . . . .   | 508               |
| ANGEL, J. LAWRENCE  |                   |
| Neolithic Ancestors of the Greeks (Plate X) . . . . .                                   | 252               |
| AVDIYEV, V.   |                   |
| Achievements of Soviet Archaeology . . . . .  | 221               |
| BEAZLEY, J. D.  |                   |
| The Brygos Tomb at Capua (Plate VII) . . . . .  | 153               |
| BIEBER, MARGARETE   |                   |
| <i>Honos and Virtus</i> . . . . .   | 25                |
| A Late Roman Portrait Head of Alexander the Great in Boston . . . . .                   | 425               |
| BLEGEN, CARL W.   |                   |
| The Roof of the Mycenaean Megaron . . . . .   | 35                |
| BONNER, CAMPBELL  |                   |
| Eros and the Wounded Lion . . . . .   | 441               |
| BRENDEL, OTTO   |                   |
| Procession Personified . . . . .  | 519               |
| BRONEER, OSCAR  |                   |
| Archaeology in Greece Today . . . . .   | 416               |
| CARPENTER, RHYS   |                   |
| The Alphabet in Italy . . . . .   | 452               |
| The Identity of the Ruler . . . . .   | 353               |
| DENSMOOR, WILLIAM B.  |                   |
| The Date of the Olympia Heraeum (see Searls) . . . . .                                  | 62                |
| HANFMANN, GEORGE M. A.  |                   |
| Horsemen from Sardis . . . . .  | 570               |
| HILL, DOROTHY KENT  |                   |
| Bonn or Colmar Painter (?) . . . . .  | 503               |
| IMMERWAHR, SARA ANDERSON  |                   |
| Three Mycenaean Vases from Cyprus in the Metropolitan Museum of Art . . . . .           | 534               |
| JOHNSON, FRANKLIN P.  |                   |
| The Late Vases of Hermonax . . . . .  | 491               |
| JONES, FRANCES FOLLIN   |                   |
| Rhosica Vasa . . . . .  | 45                |
| KOBER, ALICE E.   |                   |
| Evidence of Inflection in the "Chariot" Tablets from Knossos . . . . .                  | 143               |
| LEHMANN, KARL   |                   |
| The Girl Beneath the Apple Tree . . . . .   | 430               |
| LEVI, DORO  |                   |
| Gleanings from Crete . . . . .  | 270               |
| LITTLE, ALAN M. G.  |                   |
| The Formation of a Roman Style in Wall Painting . . . . .                               | 134               |
| LUCE, STEPHEN B.  |                   |
| Archaeological News and Discussions . . . . .   | 81, 159, 358, 582 |
| MCCRIMMON, MARY   |                   |
| Graeco-Egyptian Masks and Portraits in the Royal Ontario Museum (Plates I-VI) . . . . . | 52                |
| MILNE, MARJORIE J.  |                   |
| A Prize for Wool-Working . . . . .  | 528               |
| MYLONAS, GEORGE E.  |                   |
| A Signet-Ring in the City Art Museum of Saint Louis . . . . .                           | 557               |
| RAUBITSCHKE, ANTONY E.  |                   |
| Hadrian as Son of Zeus Eleutherios . . . . .  | 128               |
| The Priestess of Pandrosus . . . . .  | 434               |
| RICHTER, GISELA M. A.   |                   |
| An Ivory Relief in the Metropolitan Museum of Art . . . . .                             | 261               |
| Peisistratos' Law Regarding Tombs . . . . .   | 152               |



|  | PAGE               |
|--|--------------------|
| ROBINSON, C. A., JR.   |                    |
| Alexander the Great and Parmenio . . . . .   | 422                |
| The Zeus Ithomatos of Ageladas . . . . .   | 121                |
| ROBINSON, DAVID M.   |                    |
| Bibliography of Archaeological Books—1944 . . . . .  | 205                |
| A New Attic Onos or Epinetron . . . . .  | 480                |
| ROSS, MARVIN CHAUNCEY  |                    |
| Fragment of a Consular Diptych . . . . .   | 449                |
| ROWLAND, BENJAMIN, JR.   |                    |
| Gandhāra and Early Christian Art: Buddha Palliatus . . . . .   | 445                |
| SEARLS, HELEN E.   |                    |
| Book Reviews . . . . .   | 105, 180           |
| The Date of the Olympia Heraeum (see Dinsmoor) . . . . .   | 62                 |
| SMITH, H. R. W.  |                    |
| From Farthest West . . . . .   | 465                |
| SMITH, SIDNEY  |                    |
| Middle Minoan I-II and Babylonian Chronology . . . . .   | 1                  |
| STUART, MERIWETHER   |                    |
| The Denarius of M.' Aemilius Lepidus and the Aqua Marcia (Plates VIII-IX) . . . . .                        | 226                |
| TALCOTT, LUCY  |                    |
| Note on a Festival Jug . . . . .   | 526                |
| VANDERPOOL, EUGENE   |                    |
| An Unusual Black-Figured Cup . . . . .   | 436                |
| VERDIANI, CARLO  |                    |
| Original Hellenistic Paintings in a Thracian Tomb (Excerpted from the Italian by Rhys Carpenter) . . . . . | 402                |
| WILLIAMS, PHYLLIS L.   |                    |
| Amykos and the Dioskouroi . . . . .  | 330                |
| Note on the Interpretation of the Ficoroni Cista . . . . .   | 348                |
| ABBREVIATIONS . . . . .  | 118                |
| ARCHAEOLOGICAL NEWS AND DISCUSSIONS . . . . .  | 81, 159, 358, 582  |
| America . . . . .  | 98, 173, 375, 598  |
| Early Christian and Byzantine . . . . .  | 89, 168, 368, 595  |
| Egypt . . . . .  | 84, 163, 363, 587  |
| Far East . . . . .   | 100, 177, 377, 598 |
| General and Miscellaneous . . . . .  | 84, 160, 361, 585  |
| Greece . . . . .   | 87, 164, 364, 589  |
| Iran . . . . .   | 87                 |
| Mediaeval . . . . .  | 95, 171, 370, 596  |
| Mesopotamia . . . . .  | 85, 163, 363, 587  |
| Necrology . . . . .  | 82, 159, 358, 582  |
| Palestine . . . . .  | 86, 164, 364       |
| Palestine and Syria . . . . .  | 588                |
| Renaissance . . . . .  | 97, 173, 373, 597  |
| Roman Britain . . . . .  | 89, 167, 368, 595  |
| Roman Gaul . . . . .   | 368                |
| Rome . . . . .   | 365, 594           |
| Transjordan . . . . .  | 86                 |
| U.S.S.R. . . . .   | 102, 177, 377, 599 |
| ARCHAEOLOGICAL NOTES . . . . .   | 221, 402           |
| BIBLIOGRAPHIES OF BOOKS THAT HAVE APPEARED SINCE THE OUTBREAK OF THE WAR: France,                          |                    |
| Germany, Italy . . . . .   | 209                |
| BIBLIOGRAPHY OF ARCHAEOLOGICAL BOOKS—1944—David M. Robinson . . . . .                                      | 205                |
| BOOK REVIEWS . . . . .   | 105, 180, 378, 600 |
| THE INTERNATIONAL ASSOCIATION FOR CLASSICAL ARCHAEOLOGY . . . . .  | 396                |
| NEWS FROM CONQUERED COUNTRIES . . . . .  | 420                |



# CONTENTS

vii

## PLATES

- I-IV. Graeco-Egyptian Masks in the Royal Ontario Museum
- V. Graeco-Egyptian Portrait in the Royal Ontario Museum
- VI. Graeco-Egyptian Portraits in the Royal Ontario Museum
- VII. Brygos Cup London E65
- VIII. Denarius of M. Aemilius Lepidus, Enlarged about 1½ Diameters
- IX. Reconstruction of the Pre-Augustan Aqua Marcia where it crossed Via Praenestina.
- X. *Upper Row: 1 Ast, Male Calvaria of Gracile Mediterranean Type from Neolithic Cave Burial near Astakos, Acarnania. Second Row: 2 Ast, Male Calvaria of Linear Mediterranean Type from the Same Site. Lower Row: 1 Hag, Male Cranium of Basic White Type, "Megalithic" Subgroup, from Neolithic Secondary Cist Burial in the Hageorgitika Mound, Arcadia.*

## BOOKS REVIEWED

|  | PAGE |
|--|------|
| Anfray, Marcel. <i>L'Architecture Normande</i> . (E. Baldwin Smith) . . . . .  | 630  |
| Babelon, Jean. <i>Le Portrait dans l'Antiquité d'après les Monnaies</i> . (Agnes B. Brett) . . . . .   | 388  |
| Bailey, Albert Edward; Conant, Kenneth John; Smith, Henry Augustine; and Eastman, Fred. <i>The Arts and Religion, the Ayer Lectures of the Colgate-Rochester Divinity School</i> . (C. R. Morey) . . . . .                                   | 118  |
| Beazley, J. D. <i>Attic Red-Figure Vase-Painters</i> . (H. R. W. Smith) . . . . .  | 183  |
| Belaiew, N. v. de Mecquenem  |      |
| Bérard, Jean. <i>La Colonisation Grecque de L'Italie Méridionale et de la Sicile dans l'Antiquité: L'Histoire et la Légende</i> (Bibliothèque des Écoles Françaises d'Athènes et de Rome, fasc. 150). (David M. Robinson) . . . . .          | 621  |
| Boak, A. E. R. v. Husselman  |      |
| Chapouthier, Fernand; and Demargne, Pierre. <i>Fouilles Exécutées à Malliá. Troisième rapport. Exploration du Palais. Bordures orientale et septentrionale</i> (1927, 1928, 1931, 1932). (Saul S. Weinberg) . . . . .                        | 603  |
| Conant, Kenneth John v. Bailey   |      |
| Conteneau, G. v. de Mecquenem  |      |
| Corpus Vasorum Antiquorum, U. S. A., San Francisco, Fascicule 1. v. Smith, H. R. W.  |      |
| Croiset, Maurice. <i>La Civilisation de la Grèce Antique</i> (Bibliothèque Historique). (David M. Robinson) . . . . .  | 623  |
| Daux, Georges. <i>Chronologie Delphique. École Française d'Athènes: Fouilles de Delphes; III, Épigraphie</i> (fascicule hors série). (William B. Dinsmoor) . . . . .   | 606  |
| Dawson, C. M. <i>Romano-Campanian Mythological Landscape Painting. Yale Classical Studies, Volume 9</i> . (Alan M. G. Little) . . . . .  | 193  |
| de la Coste-Messelière, Pierre. <i>Delphes. Photographies de Georges de Miré; avant-propos de Charles Picard</i> . (Saul S. Weinberg) . . . . .  | 182  |
| Demangel, R.; and Mamboury, E. <i>Le Quartier des Manganes et la Première Région de Constantinople</i> . (Emerson H. Swift) . . . . .  | 631  |
| Demargne, Pierre v. Chapouthier  |      |
| de Mecquenem, R.; Conteneau, G.; Pfister, R.; and Belaiew, N. <i>Mémoires de la Mission Archéologique en Iran. Tome XXIX. Mission de Susiane. Archéologie Susienne</i> . (Donald McCown) . . . . .   | 600  |
| Drucker, Philip. <i>Ceramic Sequences at Tres Zapotes, Vera Cruz, Mexico</i> . (Smithsonian Institution, Bureau of American Ethnology, Bulletin 140). (Linton Satterthwaite, Jr.) . . . . .  | 200  |
| Dussaud, René. <i>Les Découvertes de Ras Shamra (Ugarit) et l'Ancien Testament. 2e édition revue et augmentée</i> . (James A. Montgomery) . . . . .  | 378  |
| Eastman, Fred v. Bailey  |      |
| Edgerton, W. F. v. Husselman   |      |
| Fewkes, Vladimir J. <i>Catawba Pottery-Making, with notes on Pamunkey Pottery-Making, Cherokee Pottery-Making, and Coiling. Proceedings of the American Philosophical Society, Vol. 88, No. 2, July 1944</i> . (Frederick Johnson) . . . . . | 204  |
| Feyel, Michel. <i>Contribution à l'Épigraphie Béotienne</i> (Publications de la Faculté des Lettres de l'Université de Strasbourg, fasc. 95). (David M. Robinson) . . . . .  | 619  |
| Feyel, Michel. <i>Polybe et l'Histoire de Béotie au IIIe Siècle avant notre Ère</i> (Bibliothèque des Écoles Françaises d'Athènes et de Rome, fasc. 152). (David M. Robinson) . . . . .  | 618  |



|  |     |
|--|-----|
| Filson, Floyd Vivian v. Wright   |     |
| Fisher, Reginald v. Hewett   |     |
| Foucher, A. Mémoires de la Délégation Archéologique Française en Afghanistan. Tome I. La<br>Vieille Route d'Inde de Bactres à Taxila, avec la collaboration de Mme. E. Basin-Foucher.<br>Vol. I. Introduction. Première et Deuxième parties. (Valentine Müller) . . . . .                                    | 624 |
| Gagé, Jean v. Merlin   |     |
| Guignebert, Charles. Le Christ (L'Évolution de l'Humanité, Synthèse Collective, dirigée par<br>Henri Berr). (C. C. McCown) . . . . .   | 629 |
| Hewett, Edgar L. From Cave Dwelling to Mount Olympus. (Katherine McClellan) . . . . .  | 198 |
| Hewett, Edgar L.; and Fisher, Reginald. Mission Monuments of New Mexico. (Katherine<br>McClellan) . . . . .  | 199 |
| Holmberg, Erik J. The Swedish Excavations at Asea in Arcadia (Skrifter utgivna av Svenska<br>Institutet i Rom. XI.). (Saul S. Weinberg) . . . . .  | 381 |
| Hunt, George T. Wars of the Iroquois. (George C. Vaillant) . . . . .   | 105 |
| Husselman, E. M.; Boak, A. E. R.; and Edgerton, W. F., editors. Papyri from Tebtunis, Part II.<br>Michigan Papyri, vol. V. (Rafael Taubenschlag) . . . . .   | 189 |
| Juan, Staden v. Wernicke   |     |
| Kolbe, Walther. Die Aetolischen Soterien und die Attische Archontenforschungen. Sitzungsberichte<br>der Heidelberger Akademie der Wissenschaften, Philosophisch-Historische Klasse, 1942/43,<br>1. (William B. Dinsmoor) . . . . .   | 610 |
| Ktistopoulos, Const. Dem. A Contribution to the Problem of the Minoan Script. (Alice E.<br>Kober) . . . . .  | 605 |
| Lafargue, Marie. Les Chapitiaux du Cloître de Notre-Dame la Daurade. (William H. Forsyth)  | 391 |
| Legrain, Leon. The Babylonian Collection of the University Museum. University Museum Bulle-<br>tin, Vol. X, Nos. 3-4 (University Museum, University of Pennsylvania). (Valentine Müller)   | 105 |
| Lloyd, Seton. Ruined Cities of Iraq. Second Edition. (Valentine Müller)  | 106 |
| Longyear, John M. III. Archaeological Investigations in El Salvador, with an Appendix by<br>Stanley H. Boggs. Memoirs of the Peabody Museum of Archaeology and Ethnology, Har-<br>vard University, Vol. IX, No. 2. (Mary Butler) . . . . .   | 634 |
| Mamboury, E. v. Demangel   |     |
| Mattingly, Harold; Sydenham, Edward A.; and Sutherland, C. H. V. The Roman Imperial Coin-<br>age, Vol. IV, Part 2: Macrinus to Papienian. (Robert O. Fink) . . . . .   | 110 |
| Méautis, George. Mythes Inconnus de la Grèce Antique. (David M. Robinson) . . . . .  | 622 |
| Memorias de los Museos Arqueológicos Provinciales, 1940, published by the Spanish National<br>Ministry of Education (Dirección General de Bellas Artes). (Rhys Carpenter) . . . . .  | 195 |
| Memorias de los Museos Arqueológicos Provinciales, 1942 (Extractos), published by the Minis-<br>terio de Educación Nacional, Dirección General de Bellas Artes, Cuerpo Facultativo de<br>Archiveros, Bibliotecarios y Arqueológicos, Inspección general de Museos Arqueológicos).<br>(G. Bonfante) . . . . . | 196 |
| Merlin, Alf. L'Année Épigraphique: Année 1940, with Jean Gagé; Année 1941; Années 1942-43.<br>(Herbert Bloch) . . . . .  | 627 |
| Morey, Charles Rufus. Mediaeval Art. (David M. Robb) . . . . .   | 116 |
| Parsons, Arthur Wellesley. Klepsydra and the Paved Court of the Pythion. Dissertation, The<br>Johns Hopkins University. (A. E. Raubitschek) . . . . .  | 187 |
| Passemard, Emmanuel. La Caverne d'Isturitz en Pays Basque. Tome IX of Préhistoire. (George<br>Grant MacCurdy) . . . . .  | 378 |
| Pfister, R. v. de Mecquenem  |     |
| Pfister, R. Textiles de Palmyre, Découverts par le Service des Antiquités du Haut-Commissariat<br>de la République Française dans le Nécropole de Palmyre, Vol. III. (Herwin Schaefer) . . . . .   | 626 |
| Picard, Charles. Manuel d'Archéologie Grecque. La Sculpture II, Période Classique, Ve Siècle.<br>(Gisela M. A. Richter) . . . . .  | 386 |
| Pritchett, W. Kendrick. The Five Attic Tribes after Kleisthenes. Dissertation, The Johns Hop-<br>kins University. (William B. Dinsmoor) . . . . .  | 614 |
| Richter, Gisela M. A. Archaic Attic Gravestones. Martin Classical Lectures, Vol. X. (Margarete<br>Bieber) . . . . .  | 384 |
| Richter, Gisela M. A. Greek Painting; The Development of Pictorial Representation from Archaic<br>to Graeco-Roman Times. (Alan M. G. Little) . . . . .   | 194 |



# CONTENTS

ix

|  | PAGE |
|--|------|
| Riefstahl, Elizabeth. Patterned Textiles in Pharaonic Egypt. (Herwin Schaefer) . . . . .   | 603  |
| Robertson, D. S. A Handbook of Greek and Roman Architecture, Second Edition. (Lucy T. Shoe) . . . . .  | 108  |
| Scott, Nora E. The Home Life of the Ancient Egyptians, a Picture Book. (Valentine Müller) . . . . .  | 105  |
| Seltzer, Carl C. Racial Prehistory in the Southwest and the Hawikuh Zunis. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Vol. XXIII, No. 1. (J. Lawrence Angel) . . . . .                                | 202  |
| Smith, Henry Augustine v. Bailey   |      |
| Smith, H. R. W. Corpus Vasorum Antiquorum, U. S. A., Fascicule 10, San Francisco, Fascicule 1 (M. H. de Young Memorial Museum and California Palace of the Legion of Honor, San Francisco). (Gisela M. A. Richter) . . . . .                       | 107  |
| Smith, H. R. W. The Hearst Hydria, an Attic Footnote to Corinthian History. University of California Publications in Classical Archaeology, Volume I, No. 10. (Gisela M. A. Richter) . . . . .   | 106  |
| Stephens, Ferris J. Old Assyrian Letters and Business Documents (Babylonian Inscriptions in the Collection of James B. Nies, Yale University, Vol. VI). (Julius Lewy) . . . . .  | 180  |
| Stirling, Matthew W. Stone Monuments of Southern Mexico. (Smithsonian Institution, Bureau of American Ethnology, Bulletin 138). (Linton Satterthwaite, Jr.) . . . . .  | 394  |
| Sutherland, C. H. V. v. Mattingly  |      |
| Swarzenski, Hanns. The Berthold Missal. The Pierpont Morgan Library Ms. 710, and the Scriptorium of Weingarten Abbey. (Adolf Katzenellenbogen) . . . . .   | 389  |
| Sydenham, Edward A. v. Mattingly   |      |
| Thompson, G. Caton. The Tombs and Moon Temple of Hureidha (Hadhramaut). Society of Antiquaries of London. (Reports of the Research Committee, No. XIII). (L. Legrain) . . . . .  | 601  |
| Toichiro, Naito. The Wall Paintings of Horyuji. Translated and Edited by William Reynolds Beal Acker and Benjamin Rowland Jr. (American Council of Learned Societies Studies in Chinese and Related Civilizations, No. 5). (Alan Priest) . . . . . | 393  |
| Waltz, Pierre. La Question d'Orient dans l'Antiquité (Bibliothèque Historique). (David M. Robinson) . . . . .  | 622  |
| Wernicke, Edmund. Vera Historia y Descripción de un País de las Salvages Desnudas Feroces Gentes Devoradoras de Hombres Situado en el Nuevo Mundo America, by Staden Juan. Traducción y Comentarios. (Alfred Métraux) . . . . .                    | 201  |
| Wright, George Ernest; and Filson, Floyd Vivian, editors. The Westminster Historical Atlas to the Bible. With an Introductory article by William Foxwell Albright. (C. C. McCown) . . . . .  | 379  |
| Wuilleumier, Pierre. Tarente, des Origines à la Conquête Romaine. (Gisela M. A. Richter) . . . . .   | 616  |

# INDEX

|   |  |
|---|--|
| Aeschylean Universe, 589  | Apollo and Zeus in Crete, Delphi, 303 ff.    |
| Alphabet in Italy, 452 ff.  | on bronze mitra (?), 294 ff.                 |
| Afghanistan, trade route to India, 624 ff.                                | warrior god, Crete, 307                      |
| Ageladas of Argos, 121 ff., 312   | Apollonios, son of Nestor, 334               |
| Aion in ancient art, 165  | Aphrodite and Peitho, New York, 267          |
| Alabaster vases, Palestinian, 86  | Aqua Marcia, 226, 237 ff.                    |
| Alexander the Great, execution of Parmenio, 422                           | Arch of Constantine, Trajanic relief, 33     |
| Altamura Painter, 473, 475-6  | Titus, 25-6                                  |
| Amasis Painter, 465 ff.   | Arches, triumphal, Roman coins, 229, 232 ff. |
| American archaeology, anthropology, 98, 173 ff., 176-7, 201, 375-6, 634-5 | Architecture, angle contraction, temples, 73 |
| Amor with Victoria, 27-8  | Gothic, bulbous domes, 97                    |
| Amykos and the Dioskouroi, 330 ff.  | Greek, 108 ff.                               |
| Angels in Early Christian Art, 89, 368-9                                  | Roman, 108 ff.                               |
| Anglo-Saxon cemetery, 168   | Roman vaulted construction, 136              |
| Anthesteria, Choës, oinochoe, Athens, 526-7                               | Romanesque, 391 ff.                          |
| Hieros gamos, oinochoe, N. Y., 520, 524 ff., 527                          | Umayyad capitals, 168                        |
|   | Archon lists, Athens, 610 ff., 614 ff., 618  |
|   | Boeotia, 618                                 |



- Delphic and Attic synchronisms, 609-10
- Asea, excavations, 381 ff.
- Asine, 36
- Assyrian chronology, 18  
king list, 18 ff.
- Athena Polias, Alea, Mantinea, 301  
Ergane, 485  
a Pre-Hellenic goddess, 297
- Athenian Treasury, Delphi, 386-7
- Athens, Acropolis, tiles, 39  
and Aphytis, 88  
water supply, 187
- Attic tribes after Kleisthenes, 614 ff.
- Ayer Guf, excavations at, 85
- Babylonian chronology and MM I-II, 1  
Collection, University Museum, 105-6  
science, 86
- Bactria, excavations, 625
- "Bandkeramik" culture, 585
- Berbat, 38-9  
Potter's kiln, 555-56
- Berlin Painter, 515
- Biblical criticism and archaeology, 379
- Black Sea, Greek cities, excavation, 103, 224
- Boeotia, Hellenistic chronology, 618-9
- Bonn Painter, 503 ff.
- Boscovale, Villa of Fannius Sinistor, 137-8
- Boston counterpart to Ludovisi Throne, 387-8
- "Boxer," Museo Nazionale, Rome, 332 ff.
- Bridges on Roman coins, 229, 231-2
- Bronze bowls, Phoenician, 327-8  
censer, East Christian, 369  
cast griffon head, Olympia, 67  
engraved mirrors, Etruscan, Praenestine, 340, 345, 353  
head, Dragon of Babylon, 271, 273  
mitra from Axòs, 293 ff.  
noseguards, Corinthian helmets, Olympia, 66  
pithoid jars LM II/III, Cyprus, 537  
statuette, helmeted man, Olympia, 65  
plaque, Arcades, 281, 289
- Bronze Age, Catalonia, 162  
Caucasus, 177-8  
South Russia, Central Asia, 222 ff.  
Tomb in Palestine, 364
- Bronzes, Chinese, archaic, 598-9  
Shang and Chou, 377  
T'ang, 101  
Pre-Roman, Spain, 362
- Brygos Painter, 156 ff.
- Brygos Tomb, 156 ff.
- Byzantine Constantinople, Mangana, excavations, 631 ff.  
illuminated manuscripts, 93, 169
- Calendar, Greek, Mycenaean origin, 589
- Cameos, 26, 28
- Capua, Tombs I-VI, 153 ff.
- Cathedral, Ferrara, 97
- Cephalenians, "racial types," 164
- Chachrylion workshop, 506
- Chalcidic alphabet and Etruscan, 457
- Chalcolithic cultures, Northern Caucasus, 177
- "Chariot" tablets, Knossos, 143 ff.
- Chronoi, mosaic, Antioch-on-Orontes, 165
- Chryselephantine statue, Zeus, Olympia, 387  
statues at Delphi, 166
- Cicero, *Rhospica Vasa*, 45
- Colonization, Southern Italy, Sicily, 621-2
- Coptic art, derived from Greek, Roman, 61
- Cretan-Mycenaean epiphany, 302, 308-9
- Crete, flounced dress, 12 ff.  
Late Mycenaean civilization in, 291  
Platanos, Tholos A, 24  
B, 7, 14, 23  
Tholoi, roofing, 7, 24
- Coin hoards, Kh. el-Kerak, 86
- Coins, Antiochus, 594  
Athenian, 486-7  
Boeotian, Hellenistic, 219  
Byzantine, 370  
Crete, 294, 300, 307, 309  
development of Roman portrait coin, 388  
Leake Collection, 167  
Macedonian, 428-9  
Messene, 122 ff., 312  
Roman, 28 ff., 32, 229 ff., 355  
Macrinus to Pupienus, 110 ff.  
M'. Aemilius Lepidus, 226-7
- Colmar Painter, 503 ff.
- Cumae and Etruscan alphabet, 452  
Etruscan Tomb, 456  
founding date, 621
- Currency Bars (?), 162
- Cylinder seal, Babylonian, 14 ff., 16  
Chaldaean, 327-8  
Kish, 271-2  
Mesopotamian, 276, 278-9  
Susa, 275  
seals, Assyrian, 181  
Egyptian, 3  
"Cypriote chariot" krater, 546 ff.
- Danubian elements, Asea, 384
- Deepdene Painter, 157-8
- Delian League, 591
- Delphi, archon lists, 606 ff.  
dissemination of alphabet from, 455
- Dionysos in the Marshes, sanctuary, 527  
statue, 526-7
- Dioskouroi, 335 ff.
- Diosphos Painter, 484, 486
- Disc acroterion, Artemis Orthia, 71 ff.  
Olympia, Heraeum B, 68, 70 ff.
- Douris, 155
- Dragon of Babylon, 270 ff., 276



- Droop cup, 436  
 Dûr Kurigalzu, excavations, 163 f.  
 Early Christian architectural painting, 595  
     iconography from Roman Orient, 448  
     sculpture, 90, 168, 445 ff.  
 Early Helladic, Asea, 381, 383-4  
 Edinburgh Painter, 468, 470-1  
 Egyptian art, Roman period, 61  
     domestic life, 105, 163  
     faience bottles, 363  
     painting on linen, 587  
     stone vases, 84  
     weaving, 163  
 Embroideries, Greek liturgical, 171  
 Enameled glass vase, Syrian Islamic, 163  
 Ephyraean goblets, 543  
 Epigraphy, Antioch, inscribed mosaic, 165  
     Argos, inscriptions, Athena Polias, 301  
     Assyrian tablets, 180  
     Attic inscriptions, Agora, 593  
         archon lists, 614 ff.  
         Hadrianic, acropolis, 128 ff.  
         Klepsydra parapet, 187-8  
         Priestess of Pandrosus, 434  
         stelae, 594  
         tribes, 614 ff.  
     Attic votive plaques, Roman, 188-9  
     "Boxer," "Hellenistic Ruler," inscriptions, 343-4  
     Canaanite cuneiform tablets, Ras Shramra, 588  
     Capestrano Warrior, inscription, 460  
     "Chariot" tablets, Knossos, 143 ff.  
     Corinthian inscription, 457  
     Delphic archon lists, 606 ff.  
     epigram, Athenians at Potidaia, 167  
     Etruscan writing-tablet, 458  
     Graeco-Egyptian mask, inscribed, 53  
     graffito, Attic Black-Figured kylix, 167, 528  
         Campanian cup, 156  
         gems, inscribed, 441-2  
     Hellenistic, Boeotian, 619  
         Persian Gulf, 594  
 Inscriptions and Classical literature, 160  
     Kassite inscriptions, 164  
     Mantineia, responses, oracle, 301  
     Möjebro Rock, Sweden, 463-4  
     Mirrors, Etruscan, 340, 345, 353  
     Nonsense inscriptions, Black-Figured cup, 439  
     Novilara stele, 461  
     Post-Sumerian tablets, Nippur, 587  
     Rhaetic jars, inscribed, 462-4  
     Roman inscriptions, 627 ff.  
         London, 89  
         Spain, 196 ff.  
     Sicilian inscriptions, 453 ff.  
     Taanach (Megiddo) tablets, 588  
     Venetic inscriptions, 461-2, 464  
 Epinetron, Robinson Coll., dating, 480 ff.  
     use and origin, 480 ff.  
 Epinetra, list of, 488 ff.  
 Eretria Painter, 483, 485  
 Eros and Mithras, 444  
 Etruria, commercial relations, Greece, 452-3  
 Etruscan alphabet, 452 ff.  
     jewellery, 324, 328  
 Euphronios, 387  
 François Vase, 364  
 French Indo-China, 100  
 Ficoroni Cista, 338, 340, 348 ff.  
 Forgeries, sculpture, criteria for detecting, 387, 425  
 Fresco, Hellenistic Thracian Tomb, 403 ff.  
 Frescoes, Brancacci Chapel, 97  
 Funeral Stelae, Graeco-Egyptian, 60  
 Gandhāra statues, Buddha Palliatus, 445 ff.  
     period, Bactria, 625  
 Gems, 27, 270, 315-6, 331, 337, 441 ff.  
 Genius Populi Romani, 30 ff.  
 "Genre" art, sanctuaries of Asklepios, 431-3  
 Geras Painter, 508 ff.  
 Ghassulian culture, 585  
 Gilgamesh, 587  
 Glass inlays, Hellenistic tomb, 405  
     plaques, Dendra, 275-6  
 Gold medallions, Abukir, 429  
     plating, Greece, 563  
     rings, Minoan-Mycenaean, 278 ff.  
 Gospels of Bert'ay, 94  
 Grave Stele, Istria, 409  
 Greek painting, 194  
     teeth, ancient and modern, 164  
 Hadrian, son of Zeus Eleutherios, 128 ff.  
 Hammurabi, date of, 1, 17  
 Hellenistic architectural painting, 134 ff.  
     paintings, Thracian tomb, 402 ff.; level, Asea, 384  
 "Hellenistic Ruler," Museo Nazionale, 330 ff., 353 ff.  
     as Sulla, 357  
 Hera, cult statue, Olympia, 66, 74 ff.  
     head, date of, 80  
     as sphinx, 74, 166  
 Heraclius, portrait (?), 90  
 Hermonax, late vases, 491 ff.  
 Hispano-Arabic ceramics, 372  
 Hittite art, 274-5  
 Honos, 25  
     military Honor, 27



- Horsemen, geometric, orientalizing 572, 574 ff.  
 House of Livia, Palatine, Rome, 140 ff.  
     the Epigrams, Pompeii, 140 f.  
     Obellius Firmus, 138 ff.  
 Hureidha, excavations at, 601 ff.  
 Hyksos, 2  
 Ideograms, Minoan script, 143, 147  
 Idolino, 387  
 Idols, Early Hellenic, Crete, 290  
 Illuminated manuscripts, 93, 169, 389 ff., 596  
 Indo-China, 100  
 Indonesian archaeology, 101  
 Iron Age deposit, Wales, 162  
 Ishtar Gate, faience work, 272  
 Isis cult, Graeco-Roman, 53, 55  
 Islamic glass vase, enameled, 163  
     incense burners, 595-6  
 Ithome, 123  
 Ivory consular diptych, Italo-Gallic, 449 ff.  
     figurine, Early Christian, 370  
     relief, Easter Sepulchre, 596  
         Greek, New York, 261  
 Ivories, Ephesos, Nimrud, 322  
 Jabob, King of Edom, portrait, 90  
 Jewellery, Cretan, geometric, orientalizing, 313  
     ff., 322  
     Egyptian, 279  
     from Thracian tomb, 403  
     on Graeco-Egyptian masks, 54-5  
 Japanese wall-paintings, Horyuji, 393  
 Kassite kings, 85, 164  
 Keltic metal work, Aegean patterns, 596  
 Klepsydra, Athens, excavation, 187-8  
 Knossos, "Chariot" Tablets, 143 ff.  
 Koban culture, 178  
 Laconian roof tiles, Olympia, Heraeum, 69  
 Lamps, Balearic Islands, 594  
 Latin alphabet and Etruscan, 459  
 Limoges reliquary chest, 96  
 Little Master cups, 436 ff., 467, 469  
 Lycian pillar tombs, false doors, 591  
 Macedonian law, conspiracy against king, 423-4  
 Magna Graecia, colonization of 452, 621-2  
 Makron, 269  
 Mallia, chronology, 605  
     early palace EM III-MM I, 604-5  
     excavations at, 603 ff.  
     palace MM IIIB-LM Ia, 603 ff.  
 Malthi, 37 ff.  
 Manuscript illumination, Keltic, 596  
 Marriage festivities, Greek, 563 ff.  
 Marsiliana alphabet, 459  
 Masks, Graeco Egyptian, 52 ff.  
 Medea Painter (Smith), 471-3  
 Mediaeval art, 116, 373, 596  
     Athens, 91  
     German towns, 371-2  
     Sculpture, 95-6, 372-3, 596  
     Theaters, 373  
 Megalithic remains, Caucasus, 178  
 Mesopotamian art, 274-5, 326-7  
     iconography, 272 ff.  
     religion, 270, 272, 280  
         serpent-griffon, 270 ff.,  
         279  
 Messene, 122  
 Metal Vases, influence LM/LH I-II pottery, 537-8  
 Middle Helladic culture, Asea, 381, 384  
 Middle Minoan I-II, chronology, 1  
     I, date, 24  
     Ib, date 6  
     IIa; IIb, dates 5  
 Miniatures, Mediaeval manuscripts, 94, 96, 389 ff.  
 Minoan iconography, 274-5  
     morphology, 150  
     script, hieroglyphic, 143  
         Linear, Class A, 143  
         Linear, Class B, 143-4  
             inflection 144 f.  
             phonetic values,  
             605 ff.  
 Moulds, bronze casting, Mallia, 604  
 Mycenaean megaron, roof, 35 ff.  
 Myson, 473, 475  
 Naupaktos, 121, 123  
 Near East, and Caucasus, 178  
 Neolithic A, partial eastern origin, 260  
     culture, Asea, 381, 383-4  
     skeletal remains, Greece, 252 ff.  
 Nikai, golden, Athena, 88  
 Niobid Painter, 154-5  
 Nishapur, heating and cooking, 87  
 Norman architecture, 631  
 Olympia, Heraeum A, 64-5  
     B, 65, 68  
     sequence of temples, 64  
 Onos v. epinetron  
 Oriental influence, Greece, Asia Minor, 579 ff.  
 Outing Painter (? Smith), 468, 471-3  
 Painter of Berlin Hydria, 154  
 Painting v. Wall Painting  
 Palaeolithic Collection, Barcelona, 361  
     station, Isturitz, 378  
 Palladium, 296, 297  
 Pamphaios, white garland cup, 477 ff.  
 Pan Painter, 473, 475  
 Pandrosus, decree concerning priestess, 434 ff.  
 Papyri from Tebtunis, 189 ff.  
     Philinna, 167  
 Parmenio, execution of, 422 ff.  
 Pausanias, on Heraeum, Olympia, 63, 66, 73, 76-7  
     Zeus Ithomatas, 121 ff.  
 Paved court of Pythion, Athens, 188-9  
 Peisistratos, law regarding tombs, 152  
 Peloponnesian Messene, 122  
 Phanagoria, excavations, 102-3



- Phoenician alphabet and Greek, 456  
 Phoenicians, primitive home of, 378  
 Pigments, Greek, 593  
 Pinax, Mycenae, 297, 299  
 Polion, 473, 476  
 Polos, 296  
 Polybius, fragments on Boeotia, 618  
 Polygnotos, vase at Capua, 155  
 Pompe, personified, oinochoe, N. Y., 519 ff.  
 Pompeian painting, evolution of style, 134 ff.  
 Porcelains, Chinese, Wan Li, 102  
 Portraits, Graeco-Egyptian, 52 ff.  
     on coins, 388-389  
 Pottery, Apulian vases, 473 ff.  
     Arretine, date of, 51  
     Attic Black-Figure, 106 f., 167, 436 ff.,  
         465 ff., 488, 592  
         Red-Figure, 268, 269, 471, 474 ff.,  
         489, 491 ff., 503 ff., 508 ff., 592  
     "Bilingual" Eye-cup, Italic, 473-4  
     Bronze Age, Caucasus, 177  
     Campanian, 153 ff., 592  
     Castromao, 361  
     Corinthian, 67 ff., 77, 106, 453  
     Crete, barbotine, 2 ff.  
         geometric, 287-8, 293, 592  
         orientalizing, 294, 296, 592  
             Minoan Mycenaean,  
                 282 ff., 293  
     Early Dynastic, Susa, 601  
     Early Helladic, Asea, 382  
     East Mediterranean, lead glazed, 46 ff.  
     Eretria, polychrome relief oinochoe, 592  
     Fikellura ware, 364  
     From Hureidha, 602  
         Tarsus and Antioch, 45  
     Green-glazed ware, Roman Syria, 365  
     kalathos, Hearst Collection, 465, 6  
     Kamarais ware, date, 1  
     Laconian II-III, 71 ff.  
     Late Helladic, Asea, 383  
     "Levanto Helladic" ware, 554-5  
     Lydian, geometric and orientalizing, 570,  
         578 ff.  
     Middle Helladic, Asea, 383  
     MM III-LM I, Mallia, 604  
     Minoan, 310  
         vase, Abydos, 3  
     Minyan, 383  
         black, origin of, 383  
     Mycenaean, amphoroid kraters, 537-8,  
         545, 549  
         from Cyprus, N. Y., 534 ff.  
         pictorial style, 534, 540 ff.,  
         545 ff.  
         and frescoes,  
         549 ff., 553,  
         555  
         place of man-  
         ufacture,  
         554 ff.  
         Tell el-Amarna period, 537  
         ff., 540 ff., 546, 553  
     Neolithic, Asea, 382-384  
     Olympia, local ware, 66  
     Palace Style LM/LH II, 537, 540, 543 ff.  
     "Pergamene", 45  
     plastic vases, 156 ff., 473, 475 ff.  
     Protocorinthian, 311-12  
     Ras Shamra, polychrome vases, MM II  
         a, 4  
     Rhosica vasa, 45 ff.  
     Roman, in Britain, 167-8, 368  
         Spain, 368  
     Sardis, orientalizing ware, 570 ff.  
     subgeometric Protocorinthian, Olympia,  
         65-6  
     Tell el-Yahudiyeh ware, 2  
     Transjordan, 87  
 Praisos, 280, 281, 291  
 Pre-Dimini Thessalian culture, Asea, 384  
 Pre-Hellenic religion, Crete, Greece, 294, 305 ff.,  
     310  
 Praenestine fibula, dating of alphabet, 459  
 Princeton Painter, 465  
 "Racial types" of Greeks, 164, 252 ff.  
 Ras Shamra (Ugarit), 4-5  
     excavations, 378  
 Religion  
     Mesopotamian, 270, 272, 280  
     Prehellenic, Crete, Greece, 294, 305 ff., 310  
 Renaissance architecture, Spain, 374-5  
     art, 97, 173, 374-5, 597-8  
     Greek history in, 597  
 Rhosus, on Bay of Issus, 45  
 Ring-stones, 331, 337  
 Roman London, 89  
     mercantilism, 365-6  
     remains, Spain, 365, 366  
     theater, Tarragona, 366-7  
 Romanesque architecture, Spain, 171  
     sculpture, Spain, 373-4  
 Romano-British art, 367-8  
 Romano-Campanian landscape painting, 193  
 Roof tiles, Early Helladic, 36  
     Middle Helladic (?), 37  
     Olympia, Heraeum, 69  
 Rostra, on Roman coins, 235-6  
 Runic alphabet, Etruscan connections, 462  
 Russian Church, wearing of cross, 599  
 Sabouroff Painter, 473, 476  
 Sakonides, 440  
 Sanctuary of Asklepios, Kos, 430, 433  
 San, Cretan origin, 457  
 Satyr-drama, influence on vase-painting, 516 ff.  
 Scroll in triumph, 25  
 Sculpture, alabaster reliefs, Nineveh, 363



- Artemision Zeus, 122, 125  
 Attic stelai, 384-5  
 "Auxerre" statuette, 268  
 "Boxer", 330 ff.  
 bronze head, Dragon of Babylon, 271, 273  
 Choiseul-Gouffier Apollo, 127  
 Doryphorus, 125, 127  
 Early Hellenic idols, Crete, 290  
 Egyptian statuette, Brooklyn, 84-5  
 Hadrian, statue, Stoa of Zeus, 131 ff.  
 head, Alexander the Great, Boston, 425 ff.  
 Hellenistic, 433  
 "Hellenistic Ruler", 330 ff., 353 ff.  
 marble group, New York University, 430 ff.  
 Nikai, golden, Athena, 88  
 Roman, Arch of Titus, 26  
     figurine, 367  
     relief, Cordova, 367  
     Trajanic relief, 33  
 terracotta head, Praisos, 281, 291  
     Sparta, 281, 290-1  
     relief, Nippur, 271, 273  
     sphinx head, Calydon, 77, 79-80  
     Winged Nike, Delos, 79, 80  
 Seal, bezel of signet-ring, 557 ff.  
     impressions, Mesopotamian, 278  
         Minoan, 270 ff., 276, 299 ff., 308  
 Seals v. cylinder seals, ring-stones, signet-rings  
     Assyrian, 326-7  
     from Hureidha, 602  
     Transjordan, 87  
     oriental, Redpath Library, 587  
 Suessula Painter, 592  
 Shrine, model, pottery, Phoenician, 86  
 Sicilian alphabet, origin, 453 ff.  
 Signet-ring, archaic, N. Greek, 557 ff.  
     Attic, 560-1  
     Minoan-Mycenaean, 560  
 Siren, on sherd, Praisos, 280 ff.  
     transmission to Greece, 292  
 Slav tribes, 223, 225  
 Smithing, Greek, 162  
 Sotades Painter, 157-8  
 Spanish Christian iconography, 393  
 Stained glass, 96  
 Susa, excavations at, 600  
 Suvar, excavations, 103  
 Swing Painter, 465  
 Sword moulds (?), Roman, 162  
 Syriskos Painter, 156  
 Taanach (Megiddo), mound, 588  
 Tang figurines, 177  
 Tarentum, pre-Roman history, 616 ff.  
 Tapestries, colonial Peru, 98-9  
     mediaeval, 96  
 Tell Hassuna, excavations, 163  
 Temple of Hera, Olympia, 62 ff.  
     Sin, Madâbun, 602  
     rôle in Egyptian, Mesopotamian society, 84  
 Temples of Commodus, Corinth, 165-6  
     Syria, Palestine, 588  
 Textiles, Palmyra, 626  
     patterned, pharaonic Egypt, 603  
     tomb of Kuo Ch'in Wang, 599  
 Thessaly I v. pre-Dimini  
 Tholoi, Arpachiyah, 7  
     Crete, Platanos, 7, 14, 23-4  
     Tepe Gawra, 7  
     Thrace, Kusanlik, 402 ff.  
 Tibetan Painting, 101  
 Tleson, 467 ff., 469  
 Tomb, Hellenistic, Kusanlik, Bulgaria, 402 ff.  
 Tombs, anti-luxury decree, Athens, 152  
     Capua, I-VI, 153 ff.  
 Trajan, attributes of, Athens, 131  
 Trajanic relief, 33  
 Tree of life, 326 ff.  
 Tripod, as seat of prophesy, 302, 305  
     handle ornaments, 308  
     origin of, 305  
 Tripolje culture, 221  
 Troilos Painter, 470-1  
 Tyche, Aphytian, 88  
 Ugarit v. Ras Shamra  
 Usatovo, excavations, 221  
 Vases v. pottery  
 Virtus, 25  
     Valor, 27  
 Venetic alphabet, 461-2  
 Villa Item, Dionysiac Room, 137-8  
 Visigothic antiquities, Spain, 370  
 Votive plaques, Apollo Pythios, 188-9  
     tablets, on columns, Heraeum, Olympia, 73-4  
 Wall-painting, Etruscan, 452  
     Hellenistic, 134, 402 ff.  
     Roman, 134 ff., 193  
 Wall-paintings, Horyuji, 393-4  
     Tomb III-IV, Capua, 155 ff.  
     Tomb, Kusanlik, Bulgaria, 402 ff.  
 War damage, Belgium, 98  
     England, British Museum, 162  
         Mediaeval art, 370  
     France, Mediaeval art, 370  
         Normandy, 95  
         Roman Gaul, 368  
     Greece and Crete, 416 ff.  
     Italy, Florentine galleries, 88  
         Mediaeval art, 370  
         Renaissance, Baroque art, 373  
     Russia, 179

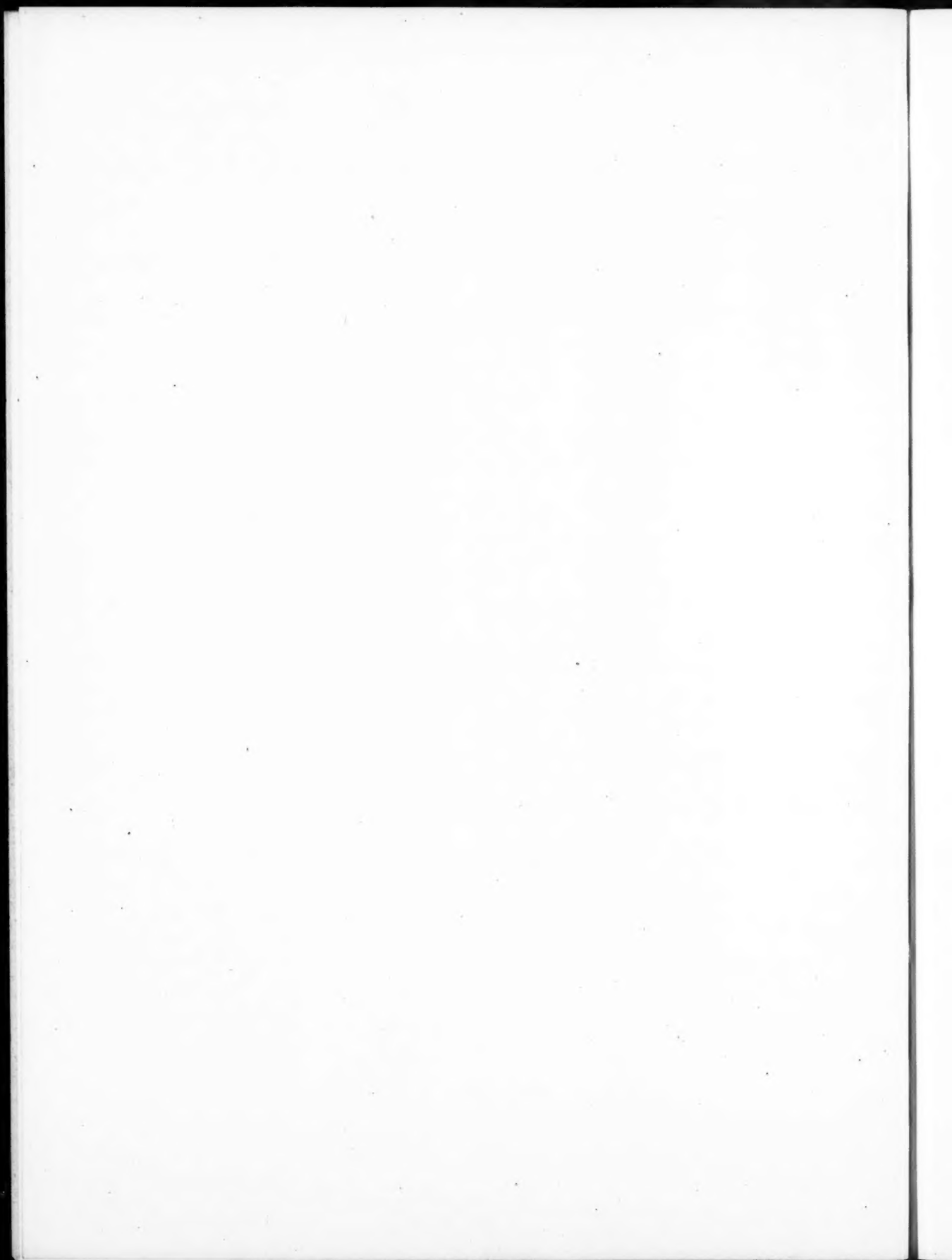


## INDEX

xv

- displacement, European collections, 585
- Warrior Vase, Mycenae, 546, 554
- Weathering, marble, 425 ff.
- Wedding Painter, 513
- Zankle-Messene, 121 ff.
- Zeus, cults, Crete, 324
- of Ageladas, 121 ff.
- Eleutherios, 128 ff.
- Ithomatas, 121 ff., 311-12
- oracle cults, 306
- Ziggurat, Tower of Babel, 587
- Zygouries pottery, 551 ff.



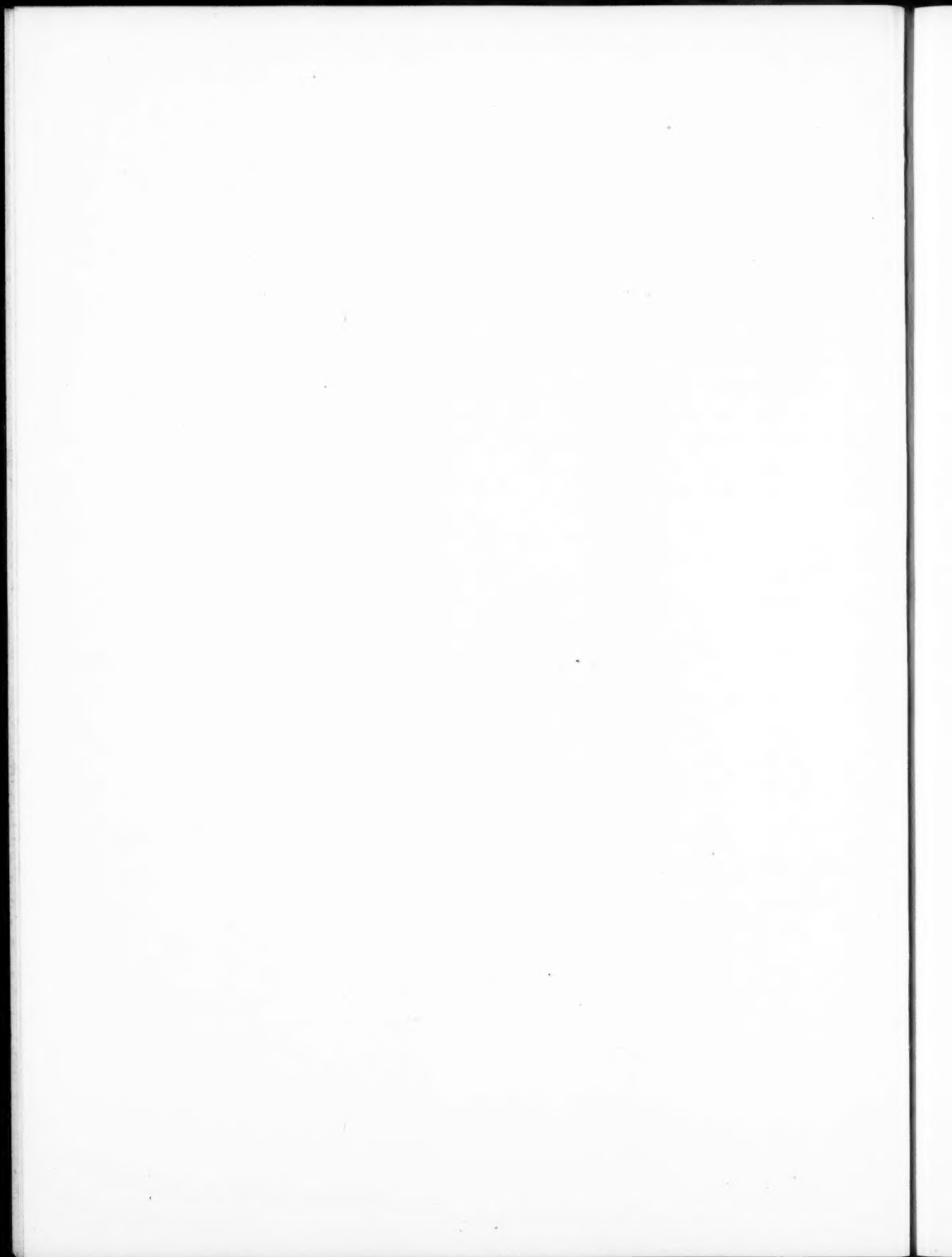




## CONTENTS

|  |     |
|--|-----|
| BIEBER, MARGARETE. <i>Honos and Virtus</i>   | 25  |
| BLEGEN, CARL W. The Roof of the Mycenaean Megaron  | 35  |
| DINSMOOR, WILLIAM B. The Date of the Olympia Heraeum (see Searls)                            | 62  |
| JONES, FRANCIS FOLLIN. <i>Rhosica Vasa</i>   | 45  |
| MCCRIMMON, MARY. Graeco-Egyptian Masks and Portraits in the Royal Ontario Museum—Plates I–VI | 52  |
| SEARLS, HELEN E. The Date of the Olympia Heraeum (see Dinsmoor)                              | 62  |
| SMITH, SIDNEY. Middle Minoan I–II and Babylonian Chronology                                  | 1   |
| Archaeological News and Discussions—Stephen Bleeker Luce                                     | 81  |
| Necrology  | 82  |
| General and Miscellaneous  | 84  |
| Egypt  | 84  |
| Mesopotamia  | 85  |
| Palestine  | 86  |
| Transjordan  | 86  |
| Iran   | 87  |
| Greece   | 87  |
| Roman Britain  | 89  |
| Early Christian and Byzantine  | 89  |
| Mediaeval  | 95  |
| Renaissance  | 97  |
| America  | 98  |
| Far East   | 100 |
| U.S.S.R.   | 102 |
| Book Reviews—Helen E. Searls   | 105 |







## MIDDLE MINOAN I-II AND BABYLONIAN CHRONOLOGY<sup>1</sup>

A RECENT statement that "any Aegean archaeologist familiar with the material from Western Asia will at once see what a tremendous gain for rational comparative archaeology is represented by these reduced dates,"<sup>2</sup> that is by dating the reign of *Hammurabi* within the second half of the eighteenth century B.C., may be thought some slight justification for the re-examination of the chronology of the early phases of the Middle Minoan period by one who is not an Aegean archaeologist. The purpose is to show that Babylonian chronology cannot be fixed without consideration of evidence from Crete.

### (1) *Middle Minoan II*

There is evidence for dating this period in terms of Egyptian chronology in three classes of objects, (1) Cretan pottery found in Egypt, (2) Egyptian stone objects found in Crete, and (3) Cretan pottery found at Ras Shamra. An attempt has been made to belittle the evidence, which has been briefly answered.<sup>3</sup>

Sherds of Kamarais ware of MM II *b* style<sup>4</sup> were found by Petrie at Lahun in a settlement of workmen near the pyramid of Senusret II, abt. 1895-1877 B.C. The settlement probably lasted after the pyramid had been completed and the tomb closed, perhaps until the time when the cults of the deified kings of the xiiith. Dynasty fell into desuetude as the xiiiith. Dynasty began to lose full control in Egypt, about 1750 B.C.<sup>5</sup> There is nothing which can be thought to necessitate an earlier date for the deposit of rubbish than 1800 B.C.; but it is impossible to believe that the sherds were deposited later than 1700.

A more homogeneous lot of sherds, corresponding rather closely with the material found below the southeast corner of the palace at Knossos,<sup>6</sup> was found at Haragah by Engelbach, in a settlement similar to Lahun, but occupied, apparently, by people in better paid work on Senusret II's tomb. The sherds were in town rubbish dumped over a cemetery area, one of four in close proximity. One inscribed object found in the heap, a limestone block, bears the name of Senusret II. The excavator has pointed out that the rubbish was brought from elsewhere to the cemetery: it may be due to the general clearing up of the site when the tomb was closed, for the deposit must in any case be later than 1880. Engelbach has rightly insisted that, though objects inscribed with the names of Senusret III and Amenemhet III were fairly common

<sup>1</sup> The following abbreviations are employed:

*ArchC.* J. D. S. Pendlebury, *The Archaeology of Crete*.

*BFC.* Nils Åberg, *Bronzezeitliche und früheisenzeitliche Chronologie*, Teil IV, Griechenland.

*CGBA.* H. R. H. Hall, *The Civilization of Greece in the Bronze Age*.

*CylS.* H. Frankfort, *Cylinder Seals*.

*PAP.* E. J. Forsdyke, *Prehistoric Aegean Pottery* (B.M. Catalogue).

*PM.* Sir Arthur Evans, *The Palace of Minos*.

*VTM.* S. Xanthoudides, *The Vaulted Tombs of Mesara* (trans. by J. P. Droop).

<sup>2</sup> *AJA.* xlvii, p. 492.

<sup>3</sup> *BFC.*, pp. 3-4; *ArchC.*, pp. xxxi-xxxii.

<sup>4</sup> *PAP.*, p. xxxv.

<sup>5</sup> Compare what is said of the desecration of the princesses' tombs in the temple of the xiiith. Dynasty king Neb-hêpet-Ra' by H. E. Winlock, *Excavations at Deir el Bahri, 1911-1931*, pp. 42-43.

<sup>6</sup> *PM.* ii, p. 214.



elsewhere in the excavated area, nothing of the sort turned up in this particular deposit. This consideration ought not to be disregarded in any attempt to weigh the evidence.<sup>7</sup> A round date about 1850 B.C. for this deposit cannot be far wrong, and this provides a sound *terminus ante quem* for the beginning of MM II *a*.

The fact that a fragment of Tall al Yahudiyyah ware was found in the deposit has been used as an argument against this conclusion.<sup>8</sup> Opinion has fluctuated about this type of incised and generally white-filled black pottery. When first found, it was thought to belong to the time of the late xii<sup>th</sup>. and of the xiii<sup>th</sup>. Dynasty. Later it was found in considerable quantities in contexts that could not be earlier than the Hyksos Dynasty. This, unfortunately, led to the conclusion that all previous observations in excavations had erred, and the pottery was dubbed "Hyksos." The nomenclature led, by an easy transition, to the assumption that the presence of this pottery on a site was a sure mark of a "Hyksos" race being settled there. The rediscovery of the fact that al Yahudiyyah ware occurs sporadically<sup>9</sup> in xii<sup>th</sup>. Dynasty contexts then led to a theory that this "Hyksos" people were present in Egypt before 1800 B.C. Thus the argument turned full circle. The conclusion ought to be reversed. Incised black juglets with white filling, and the piriform jugs generally, should not be called "Hyksos," and cannot be used as a proof, on Egyptian sites, of dating within the Hyksos period, unless they occur in considerable numbers. The presence of a sherd of this type in the deposit of rubbish containing MM II *a* sherds at Haragah does not necessarily mean, then, that the rubbish was deposited in the Hyksos period, or even that it must be dated after 1800. The fact that there was only one piece of such ware points the other way.

The legitimate deduction from a comparison of the sherds at Haragah and Lahun is that the former lot, including barbotine ware and a sherd with the "racquet and ball" pattern, are of MM II *a* style and distinct from the latter lot, II *b* style, not only in decoration but in date. This is of importance because it is a decisive argument for maintaining that the stylistic classification introduced by Evans has a chronological significance.

Support for this view is to be found in the tomb at Abydos excavated by Professor Garstang.<sup>10</sup> This tomb lay in a cemetery that remained in use till the Hyksos period. This has been thought to imply that the tomb may be later than the xii<sup>th</sup>. Dynasty;<sup>11</sup> but a tomb ought to be dated by its contents, not by the latest tombs in the cemetery. There were six shafts, built at one and the same time; the fragments of a MM II vase were found in the best preserved, the third, section. Among over one hundred objects from the tomb, some might be, considered by themselves, as late as the xiii<sup>th</sup>. Dynasty. It has been asserted with some emphasis<sup>12</sup> that the faience figures cannot be earlier than the xiii<sup>th</sup>. Dynasty, but this is incorrect. No object

<sup>7</sup> As in *BFC.*, p. 3, and Schaeffer, *Ugaritica* i, pp. 56-59.

<sup>8</sup> *Ugaritica*, p. 59.

<sup>9</sup> Engberg, *The Hyksos Reconsidered*, pp. 26-28. For a criticism see *PEQ.* 1940, pp. 64-74, not adequately represented by Millar Burrows, *What mean these stones?*, p. 89, note 1. The plain fact is that the attachment of a name of a dynasty of foreign princes to pottery must not be used as historical evidence that followers of these princes entered Egypt before 1800. The name "Hyksos" was attached to the pottery because the use of the pottery was thought to be restricted in time to the period of foreign rule, and its use in a chronological sense must not, when that sense is recognized not to be rigidly applicable, suddenly be applied in an unjustifiable way to a theory of racial movements.

<sup>10</sup> *LAAA.* v, pp. 107-111.

<sup>11</sup> *Ugaritica* i, pp. 59-60.

<sup>12</sup> von Bissing in *JEA.* i, p. 226, said: "The shape of the vases and figures in Egyptian faience does



from the tomb need be later than the end of the xiiith. Dynasty and some are unquestionably xiiith. Dynasty. The excavator examined the possibility of the tomb having been re-used and was convinced that this may be excluded;<sup>13</sup> no *a priori* reasoning should be allowed weight against investigation of the tomb by the excavator. The burials in the different sections must all have been effected within a very short period, and the objects are all roughly contemporary in manufacture and certainly contemporary in use. In one section, not with the Minoan fragments, were two glazed cylinder seals and a scarab; one cylinder bore the name of Senusret II, the other that of Amenemhet III associated with another royal name.<sup>14</sup> Egyptian cylinders were not, in the Middle Kingdom period, ordinary seals, like the scarabs of which there is an example inscribed *S<sup>3</sup>.m.pt*, Sa-em-pet, in the tomb; they seem always to have been used for official purposes and, when they bear royal names, to have belonged to officers of the Pharaoh,<sup>15</sup> however minor those officials were. Any person with whom such cylinders were buried must have been buried within a reasonable period of the Pharaoh's reign. The tomb containing the Minoan pot at Abydos was in use at the death of an official who held office under Senusret II, that is before about 1877, and under Amenemhet III, that is after about 1837 B.C. Nothing in the tomb conflicts with the inference that the tomb was sealed by 1830 B.C., or shortly after.

The pot, as reconstituted from the fragments, was classed by Evans as MM II *b*, the reason given being the absence of barbotine decoration.<sup>16</sup> But Pendlebury<sup>17</sup> has rightly pointed out that a vase from Knossos which closely resembles that from Abydos<sup>18</sup> has the "racquet and ball" pattern, which is admittedly typical of MM II *a*. He concludes that the Abydos pot and its fellow from Knossos represent a "transition" from II *a* to II *b*. The implication may be, not that manufacture of II *a* had ceased, but that both types were being produced about 1830.

not, so far as our knowledge goes, allow of any date before the late xiiith-xviiith. Dynasties." All our knowledge contradicts this statement, but it has never been candidly withdrawn. In *BFC.*, p. 4, the same author wrote: "Auch die Faiencen des Grabes würden einer jüngeren Zeitansetzung nicht widersprechen." This is not so incorrect, but still wilfully omits the fact that such objects certainly could belong to the xiiith. Dynasty and have frequently been found in that connection in excavations.

<sup>13</sup> *LAAL*, v, p. 109.

<sup>14</sup> In *PM*, i, p. 263, Evans spoke of "cylinders bearing the names of Sesostri III and Amenemhat III"; Garstang also described them as "cylinders inscribed with the royal names of Kings Senusret III and Amenemhat III." This error was repeated by Åberg in *BFC.* and by Pendlebury in *ArchC.*, p. 144. That it is an error is clear from *PM*, ii, i, p. 210, fig. 118, which shows that the name was correctly given in *CGBA.*, p. 74, *hpr.k<sup>3</sup>*, Kheper-kha-Ra', Senusret II. According to *PM*, ii, i, p. 209, note 2, the late Professor Griffith thought that the other cylinder bore associated cartouches of Amenemhet III and Senusret II, but as the second cartouche is very difficult to read, the name is uncertain. In *BFC.*, p. 4, note 4, von Bissing, who had failed to correct the error as to the perfectly clear and reasonably written cylinder that is published, spoke of a "very peculiar orthography," so that he was "not sure whether they are really contemporary with the rulers concerned." Had the orthography been peculiar, Griffith would have been quick to point the peculiarities out; von Bissing, whose statement is left completely vague, had obviously not seen the originals.

<sup>15</sup> It is well known that cylinder seals of the xiiith. Dynasty bearing royal names were for official use, either in government service (see Newberry, *Scarabs*, p. 55), or for safeguarding stores (see *CylS.*, p. 297). See also *PM*, ii, i, p. 210, based on statements by Petrie and Newberry, for a refutation of the idea that cylinders might be much later than the kings whose names they bear.

<sup>16</sup> *PM*, iv, i, p. 108.

<sup>17</sup> *ArchC.*, pp. 144-145.

<sup>18</sup> Illustrated side by side, *PM*, iv, i, p. 137, figs. 107-108.



Two Egyptian objects found in Crete afford confirmatory evidence. An amethyst scarab was found loose in the soil at a cave.<sup>19</sup> Material and shape show that it was made in Egypt; it must be later than the xith. Dynasty, to judge from the legs, and earlier than the xiiith., to judge from the avoidance of hard stone at that time. The design on the base is in purely Cretan style and must have been cut after the object reached the island; it consists of a rayed disk, two jugs and a series of concentric circles round the edge. The jugs have handles and high cut-away beaks, thus resembling the form of a hieroglyphic sign in the Cretan writing; but on this seal they are used decoratively, not, apparently, to convey a meaning. Pendlebury considered that this scarab in its finished state must be dated by the earliest deposit in the cave, II *b*. The period II *b*, then, at any rate the earlier part, before the introduction of writing on the seals, must not be separated by too long an interval from the xiiith. Dynasty.

The lower part of a diorite statue of a seated man, carved in the manner of the xiiith. Dynasty, was found in "a pure MM II *b* deposit below the North-West corner of the Central Court" of the palace at Knossos.<sup>20</sup> This fragment has been too confidently ascribed to the time of Amenemhet I, within a generation.<sup>21</sup> The argument rests on three details: (1) the inscription, (2) the position of the hands, (3) the shape of the seat. The form of the inscription, as Professor Griffith pointed out, could only belong to the time of the xith., xiiith., or xiiith. Dynasty. It is not possible to exclude the later dating on the ground of personal names, such as Sat-Hathor, though this has been alleged; the carelessness of the writing points to the very end of the xiiith., or the xiiith. Dynasty, rather than an earlier date. The position of the hands is said to be impossible after the middle of the xiiith. Dynasty; but there is not sufficient private sculpture of the period available to permit of so positive a deduction from an accident of pose. The third detail is the simple rectangular shape of the seat, without any pilaster at the back, and a wide gap between the back of the calf and the front of the throne; this, it is believed, makes a date after Senusret I impossible. The inference may be erroneous; a comparison with periods for which there is copious material might show that it arises from a confusion of stylistically significant and of sporadically recurrent detail. But even if the figure was carved at this early date, it is not proved that the inscription can be so early. In any case, there is no need to suppose that the figure reached Crete before 1800. The date of deposit in the palace may be later than that. The chronological point of importance is that an Egyptian object of the xiiith. Dynasty or early part of the xiiith. was found with MM II *b* material. Arguments depending on a theory of accidental association which might be thought to have weight in dealing with either the scarab or the statue fragment lose a good deal of force when the two cases are considered together.

There is further evidence as to the date of the fine polychrome ware of MM II *a* at Ras Shamra, for "some sherds of Kamarais ware vases, as well as a complete cup, with a wall as thin as egg-shell, painted with spirals and floral designs in red and white on a deep brown ground with a metallic sheen" were found in the second

<sup>19</sup> *PM.* i, p. 199, fig. 147, states that this scarab was found "in the votive deposit of the Cave of Psychro." *ArchC.*, p. 144, states that it was "found before excavations began."

<sup>20</sup> *ArchC.*, p. 143; illustrated and described *PM.* i, pp. 286-290.

<sup>21</sup> H. G. Evers, *Staat aus dem Stein* ii, p. 96.



level.<sup>22</sup> Only one fragment has as yet been published, but the context of the complete cup and the other sherds is said to be similar and the type uniform. The fragment was found in a pit in a tomb which was re-used in the fifteenth and fourteenth centuries; at that time the pit was dug in the old floor and material from earlier burials carefully collected and placed in it. This material included two pitchers, one of polished red ware, the other with a light ground on which bands of red and black paint round the shoulder and neck are joined by sets of triple lines radiating from the neck. Such pitchers are found at Ras Shamra in other graves with examples of the incised white-filled ware and of piriform jugs of the Tall al Yahudiyyah type, and can, therefore, be as late as the seventeenth century. This must not be interpreted to mean that they always are, for these pitchers, typically Syrian, are found on sites in eastern Cilicia in earlier contexts.<sup>23</sup> The absence of al Yahudiyyah ware in the pit containing the MM II *a* fragment should mean that all the objects in it are earlier than the seventeenth century.

A few Babylonian cylinders have been found in contemporary graves in this Level II; none of them need be earlier than the time of *Hammurabi*, so far as yet published. The statement that the MM II *a* pottery at Ras Shamra is contemporary with the commencement of the First Dynasty of Babylon<sup>24</sup> is subject to some correction; the sherds are clearly contemporary with the period that cannot be earlier than the accession of *Hammurabi*, and covers the succeeding reigns. The excavator has stated that these seals are later in date than the level containing objects of the time of Senusret II, and that it is not impossible that they are later than the time of Amenemhet III; but he has not postulated any great gap between the earliest cylinders and the end of the reign of Amenemhet; he rather assumes immediate succession. Indeed, since he claims that the latest cylinders of the First Dynasty of Babylon occur in levels at Ras Shamra that are not later than the seventeenth century, the accession of *Hammurabi* cannot, on his report, be placed much later than 1800 B.C., and might be a little earlier. Dr. Schaeffer has rightly insisted that MM II *a* was in use a century later than the date usually assigned to its end, but he would not himself argue for a date much later than this. There is nothing in that view not consonant with the evidence from Egypt, but only an increase in knowledge. There was never any good reason for believing that the find at Haragah dated the end of II *a*; indeed, that assumption conflicted with the evidence of the pot from Abydos. MM II *a* was being made before 1850, and was still being produced about 1800. MM II *b* was being produced by 1830 and lasted till the catastrophe in Crete about 1700, but it is not found in Egypt later than 1750. The two styles overlapped by a period of at least 30 years. Pendlebury,<sup>25</sup> in an attempt to avoid the inference, assumed the existence of

<sup>22</sup> *Ugaritica* i, p. 54 and fig. 43; *Syria* xix, p. 203; xx, pp. 279-280.

<sup>23</sup> They occur at Gözli Kule, Tarsus, in a stratum which begins in the Troy II or III period and ends at the time of the Cappadocian tablets; the burnished jug, *AJA.* xlv, p. 63, fig. 4, belonged to the uppermost and latest reconstruction, while the painted example, *AJA.* xlii, p. 32, fig. 8, belonged to the latest phase of the painted pottery found under the "three-meter level." At Mersina similar pitchers with painted decoration occur in Levels IX-XI, see *LAAA.*, pl. LXVIII, no. 9. Since level VII contained a specimen of the interior-red-cross ware of Troy V, which Blegen has shown came to an end about 1900 B.C., the Mersina pitcher cannot be much later than 2000. The evidence from Qatna is ambiguous, that from Judaidah unpublished.

<sup>24</sup> *Syria* xx, p. 280.

<sup>25</sup> *ArchC.*, p. 145, note 3.



Tall al Yahudiyyah ware in Syria at the time of the xii<sup>th</sup>. Dynasty; his reasoning depended on the misapplication of the term "Hyksos."

This dating of the two phases, though it conflicts with the theory that the divisions recognized by Sir Arthur Evans represent an absolute succession in time, is consonant with the view that MM II *b* is a development out of, and therefore at its commencement later than, MM II *a*. In the "Royal Pottery Stores" of the palace at Knossos the three pottery types MM I *b*, II *a* and II *b* were found stratified, one separated from the other by a layer of ashes and a floor of clay. How the layers are to be explained as "different phases of one and the same catastrophe" at the end of MM II <sup>26</sup> has never been elucidated. Floors of a building do not collapse in this way, and the description of the floors as "unusually thin," because they are not so thick as those in another building, does not affect the argument from stratification. The natural conclusion is that drawn by the excavator; the three stores were deposited successively. Since the attempt <sup>27</sup> to reduce the date of the finds in Egypt to the xviii<sup>th</sup>. Dynasty is recognized to be baseless, there is no reason to suppose that the period covered by the MM II *a* store at the palace is other than the date fixed by its use abroad. The inevitable conclusion is that MM I *b* must have been in use in the palace before 1850 B.C. Åberg, though his general view that the stylistic divisions do not represent a long development lasting many centuries may be right, and though he correctly admitted that the "Older Palace period" must end about, or shortly after, 1700 B.C., <sup>28</sup> qualified the suggestion that it began in the nineteenth with a "perhaps" that is unnecessary and contrary to the evidence.

(2) *The relation of MM I to MM II*

The sequence of fashions in the palace at Knossos cannot be used indiscriminately for chronological purposes on other sites in Crete. This is admitted even by scholars who have maintained that MM I covered a long period that came to an end when MM II began. MM II "is a local development" at Knossos, and "never reaches most sites, which continue with a local form of the MM I *b* style until MM III," that is, till about 1700. The introduction of MM I in the north and center of Crete "overlapped EM III elsewhere," and MM I *a* "was almost confined to Knossos."<sup>29</sup> The greatest caution, then, is necessary in using these terms for chronology. Equally great caution must be required of those tempted to dismiss them, seeing that at Haragah, Lahun and Ras Shamra separate finds of pottery are congruent with the classification.

There is no positive evidence to show the chronological relation of MM I *a* to I *b* even at Knossos. It has been thought that some house remains in the palace area might show that the introduction of MM I *b* pottery was preceded by a fire that brought the use of I *a* to an end;<sup>30</sup> but the circumstances of the find are far from conclusive. The occurrence of types considered "transitional" between EM III and MM I *a*, and finds of unmixed deposits of I *a* are, it is argued, some proof that I *a* must be earlier than I *b* and ended before the later phase.<sup>31</sup> But the facts might be differently explained.

<sup>26</sup> *BFC.*, p. 144.

<sup>27</sup> F. W. von Bissing, *Der Anteil der ägyptischen Kunst im Kunstleben der Völker*, and in *JEA.* i, pp. 225-227; it is a recurrent theme with him.

<sup>28</sup> *BFC.*, p. 275.

<sup>29</sup> *ArchC.*, p. 94.

<sup>30</sup> *PM.* i, p. 186, note 3.

<sup>31</sup> *ArchC.*, p. xxxii.



The evidence which is always adduced in favor of dating MM I *a* before 2000 B.C. comes from Tholos B at Platanos. This tomb has provided a group of objects deserving, as a unit, separate consideration that has never been given to it, though the importance of tomb groups has always been perfectly understood.

### (3) *Tholos B at Platanos*

There were two *tholoi* at Platanos, A and B, the largest in the Messara. Neither of them presented, as excavated, any features of construction to differentiate them from other tombs of the same type. The walls of the smaller, B, lean inward from the base, and nowhere exceed 1.10 m. in height. There is some dispute as to what kind of roof was put on such walls. Xanthoudides thought that the 25 cubic meters of stone he took out of the earth inside the *tholos*, and an elliptical slab he found over it, were sufficient proof that a perfect dome was built from foundation to apex, and he compared the modern cheese dairies on Mount Ida. Pendlebury maintained that the analogy of the cheese dairies does not hold, owing to the difference in size; the mass of stone collected would only suffice, he thought, to raise the height of the wall by 80 cm. He assumed that Tholos B and other tombs of the kind were covered either with a flat roof resting on beams, or by a thatch with an orifice at the top covered by a stone, such as is found in modern huts in Macedonia. His first alternative is paradoxical, for it leaves the inclined wall unexplained; his argument as to the amount of stone required seems to underestimate the increasing part mud plaster would play in the upper construction. Any further discussion of the kind of construction ought to take some account of the round houses of Syria and the early *tholoi* at Arpachiyah and Gawra in Assyria.

Since many of the *tholoi* in the Messara plain can be shown from their contents to have been built in EM II, it has been usual to ascribe the building of Tholos B also to that period;<sup>32</sup> but Xanthoudides based his statement<sup>33</sup> on the contents; "The tomb may perhaps have been built at the end of EM III." The burial remains varied in depth from 30 to 90 cm., and consisted mainly of decomposed matter: the recognizable skeletal material was badly decayed. This is sufficient to prove repeated use over a long period, but not nearly enough for the period an EM II date for the construction would require.

Two small rectangular copper blades, of the kind thought by R. B. Seager to be for toilet use, owing to associated finds, are dated by Pendlebury<sup>34</sup> to EM II, on evidence from Mokhlos and Koumasa. These are the only objects in Tholos B that may have been made in the EM II period, and obviously they are not sufficiently strong evidence to prove that they were deposited in the tomb during EM II.

Two complete, but very small, blades and a tiny core of almost colorless obsidian, said to have come from the island of Giale, between Nisyros and Kos,<sup>35</sup> are probably work of EM III date, when there was a great increase in the use of obsidian,<sup>36</sup> which ceased before MM I. Among the otherwise unimportant stone vases was a miniature

<sup>32</sup> *CGBA.*, p. 44; *ArchC.*, pp. 63-64.

<sup>33</sup> *VTM.*, p. 92.

<sup>34</sup> *ArchC.*, p. 71.

<sup>35</sup> *VTM.*, pl. LIV, nos. 1908-9; the core is not illustrated. For the source see *PM.* ii, i, p. 14, followed in *ArchC.*, p. 39. Wace in *CAH.* i, p. 174, still thought of an African or Anatolian origin. It is very difficult to assign any specimen of obsidian to one particular source (see Dr. Prior in Frankfort, *Studies in the Early Pottery of the Near East* ii, pp. 191-192). The list of fields drawn up by Wainwright in *Ancient Egypt*, 1927, pp. 77-93, may have to be augmented considerably, as is shown by Garstang's discovery between Nevşehir and Topada, *LAAA.* xxiv, p. 52.

<sup>36</sup> *ArchC.*, p. 90.



bowl, less than one inch in height, with decoration in relief.<sup>37</sup> On the base is an eight-pointed star in a circle; on the belly two connected rows of interlacing spirals. Xanthoudides pointed out that this pattern resembles that on Cycladic stone vessels from Melos and Amorgos,<sup>38</sup> and Åberg used this observation to support his theory that the Messara tombs belonged to a colony of foreigners.<sup>39</sup> Evans, referring to the origin of running spirals, wirework, thought that the first occurrence of this decoration in Crete, on a gold cylinder from Kalathiana, must be dated EM III,<sup>40</sup> and Pendlebury concurs.<sup>41</sup> It is probable, then, that the bowl was made in EM III; but it must be remembered that outside Knossos objects of EM III type continued in use during MM I *a*. These are the only objects which can be attributed to the Early Minoan period at all in Tholos B. The fact that they are so small that they would naturally escape notice is significant. The excavator thought that at each burial the earlier grave furniture was removed and fresh objects deposited. If this hypothesis is correct, the objects from the tomb should belong to a restricted period, the group should be homogeneous. The tiny objects of early date are not inconsistent with this view, which has not received adequate attention. The only valid objection would be, if some object or objects could be shown to belong to a period different from the group of preserved antiquities, and yet too large to escape notice.

Tholos B contained only four or five daggers, and they were all of the later, long, type; Tholos A, on the other hand, contained sixty of the long daggers and many examples of the earlier, short, triangular type. This evidence alone is good proof that Tholos B does not contain material representative of the furniture of all the burials, particularly the earlier burials, once deposited. The only blade that has been fully described has the usual medial rib and a long tang for hafting; the four rivets were so arranged that three lay across the blade at its widest part, and the blade curves inwards above and below this line.<sup>42</sup> Pendlebury considered the tang a new feature in the MM I period, not found in EM III;<sup>43</sup> the broadening at the rivets, which occurs also in examples that have no tang, is a typologically earlier stage of the well-known shape in which both edges have projecting shoulders which may be part either of the blade or of the hafting. This later form is sufficiently common in the Aegean area to be called "Mycenaean" by some writers; it is found in Syria and Palestine in datable connections, with pottery of the late seventeenth or early six-

<sup>37</sup> Reproduced full size in *VTM.*, pl. xi, no. 1904 *a*; also in *PM.* ii, i, p. 194, fig. 104 *a*; *BFC.*, p. 257, Abb. 483.

<sup>38</sup> *VTM.*, p. 102.

<sup>39</sup> *BFC.*, p. 257.

<sup>40</sup> Evans cited the "ring-like object" in Schliemann, *Ilios*, p. 489, no. 837; *CGBA.*, p. 59, refers to the toilet case from Ur, of about 2600 B.C. The view originally propounded by Hall in *PSBA.* xxxi, 1909, p. 221, finally accepted by Evans, *PM.* i, p. 114, that spiral designs on scarabs of the xiiith. Dynasty derive from Crete, is now generally accepted, e.g. by Dussaud in *Iraq* vi, p. 61, note 8; it can only be proved correct if spiral ornament was well established in Crete before its introduction into Egypt. That is not certain yet. Spiral ornament appears in Western Asia on pottery at a very early period; for an example on Tall Halaf ware from Gawra see *BASOR.* 66 (April, 1937), fig. 7, bottom row and p. 12; a quadrilateral arrangement round a circular center, E. Herzfeld, *Iran in the Ancient East*, pl. xii; running spirals, R. Ghirshman, *Fouilles de Sialk* i, pl. xlvii d, no. 9 and xlviii c, no. 6. For its occurrence further east see G. D. Wu, *Prehistoric Pottery in China*, illustrations, pp. 8, 18, 32, 50, 51. It appears on a seal of Jamdat Nasr type, attached to an insect, *AJ.* x, pl. xlvi d. Of such elements Herzfeld, p. 62, rightly says: "There is no way to interpret such absolute prehistoric symbolism;" there is also no way of tracing the original center of diffusion.

<sup>41</sup> *ArchC.*, p. 70.

<sup>42</sup> *VTM.*, pl. lv, no. 1930; *ArchC.*, pl. xi, 3 d.

<sup>43</sup> *ArchC.*, p. 70.



teenth century.<sup>44</sup> The earlier form found at Platanos need not be nearly so late, and the inferences for chronology that have been based on a neglect of essential differences<sup>45</sup> have no weight. In Tholos A at Platanos the same form of dagger is to be associated with a distinctive group of pottery exactly similar to that in Tholos B.

There was not much pottery in Tholos B, and it was homogeneous: a hand-made amphora, the mouth slightly pressed in to form an elliptical shape, with a lip at each end, two broad arched handles, three projecting ridges and four bands of black paint outside; <sup>46</sup> a deep bowl with thick walls of gritty brick-red clay, decorated with a single black band outside and inside; <sup>47</sup> a dish on a narrow base; <sup>48</sup> a small cup with a flat base and large handle, covered with a black wash inside, while outside there are bands and slanting lines of black and a band of white round the brim; <sup>49</sup> a small bottle, the upper half of which had a red wash.<sup>50</sup> These specimens of common pottery belong to one period, and may not amount to more than was thought necessary for a single burial. A lamp of specifically MM I type, that is an open, flat-bottomed bowl with a projecting trough-spout and a loop handle,<sup>51</sup> in this case broken, indicates the precise period; so do several small jugs, which have a wash of black or brown on the outside and, in some cases, remains of white and red paint. Dating evidence is also provided by rhytons in the form of a bull with holes in the neck and muzzle for filling and pouring. By LM I this type had been replaced by the bull's head, a class found with the remains of the Alişar II period on Hittite sites, that is between 1900 and 1200, later rather than earlier.<sup>52</sup> A complete example of the MM I shape, showing traces of red wash, not distinguishable from examples found in Cyprus,<sup>53</sup> and two heads of such vessels turned up in Tholos B. A similar vessel in the shape of a bird,<sup>54</sup> with wings marked by low relief covered with holes, the tail grooved, the head broken off, painted with a brown wash that shows traces of decoration in white and red, may have been deposited with the rhytons. A solid terracotta figure of a bull, of rough workmanship, not particularly Cretan in style,<sup>55</sup> might belong to any ancient period; there is no reason to suppose it did not form part of the last deposit in the tomb.

Three examples of a distinguishable class of decorated pottery, all, of course, wheel-made, are of special importance for relative dating. A small bowl of red clay, which has lost both the handles that originally rose in an arch from the rim, is covered with a black wash, turning red; on the outside there is a band of red round the rim, and below that rows of a continuous loop design in white; on the inside bands,

<sup>44</sup> Petrie, *Ancient Gaza* iv, pls. xxiv and xxviii, nos. 294, 297; Petrie, *Beth-Pelet*, i, pl. ix, no. 82; *Syria* xvii, p. 135, fig. 20 and p. 141, fig. 22 c.

<sup>45</sup> In *BFC.*, p. 264, the early form is classed with the later type illustrated in *PM.* ii, ii, p. 628, fig. 392, no. 17, and even with the New York dagger from Psychro, decorated with engraved drawings of a boar hunt and bulls, *PM.* i, p. 718, fig. 541. The comparison with the intermediate form in Boyd Hawes, *Gournia*, pl. iv, no. 50, is more correct, but the presence of this MM III type in the LM I context does not support Åberg's implication.

<sup>47</sup> *VTM.*, pl. L, no. 6895; height 7 cm.

<sup>48</sup> *VTM.*, pl. L, no. 6898; measurement not given.

<sup>49</sup> *VTM.*, pl. LI, a, no. 6913; height 8 cm.

<sup>50</sup> *VTM.*, pl. LI, b, no. 6884; height 9 cm.

<sup>51</sup> *VTM.*, pl. LI, b, no. 6893; height 6 cm. On the type see *ArchC.*, p. 111.

<sup>52</sup> Von der Osten, *The Alişar Hüyük, Seasons 1930-1932*, Part II, pp. 190-191 and 168-173, figs. 209-215. The connection with Central Anatolia after 1600 is to be noted, for there is no evidence of direct connection during the period 1900-1600.

<sup>53</sup> *VTM.*, pl. LI, a, no. 6869; height 15 cm.

<sup>54</sup> *VTM.*, pl. LI, a, no. 6868; height 12 cm.

<sup>55</sup> *VTM.*, pl. LI, a, no. 6872; height 9 cm.



disks and dots in white and vermillion.<sup>56</sup> A cup has the shape of a metal prototype, the upper part being a straight-sided cylinder with a loop handle, now lost, while the lower part narrows sharply to a small base; there is a red wash inside and out, and outside also a panel decoration divided by vertical ridges in relief, flanked by rows of slanting lines in a fish-bone pattern, white and red alternately, with three vertical rows of disks joined by slanting lines, all in white.<sup>57</sup> Half of a conical tumbler has a white slip and pink wash; outside, round rim and base, bands of red and black alternate, and there is cross-hatching in dark paint on the pink ground in the center.<sup>58</sup> Of these pots Xanthoudides said: "I think it is more probable that they are MM I than MM II," indicating a doubt that will be seen to have significance. Dr. Mackenzie examined the pots in the Candia Museum: "it (the type) represents the same mature MM I *a* phase as the vases from the ossuary cells at Gournes and thus approximately corresponds in date with the foundation of the Knossian palace."<sup>59</sup> Pendlebury, though he once described the pottery of Tholos B as EM III-MM III,<sup>60</sup> later admitted that it was a "deposit of MM I polychrome vases,"<sup>61</sup> as Hall did much earlier.<sup>62</sup> The mature MM I *a* phase as defined by Evans includes two vessels from Vasiliki, the most advanced types from the "Vat Room" at Knossos, the fruit-stand and cups from Palaikastro and the vessels from Gournais; the group shows, in his opinion, "a certain advance in MM I *a* technique."<sup>63</sup> The pots belong, then, to a well-defined group that is supposed to belong to the end of MM I *a*.

One opinion that has been expressed on the dating of the pottery from the Messara tombs, and therefore of Tholos B at Platanos, diverges sharply from the general consensus: "Of the pottery painted in the simple Kamares style with white or sometimes also red lines or bands on a metallic black ground, it probably may be possible to assume, *dürfte wohl angenommen werden können*, that it continued in use during at least a part of MM III. A certain dating is however hardly attainable in most cases, not only on account of the simple nature of the pottery, but also on account of the lack of material for comparison in the contemporary development of the palace."<sup>64</sup> The pots from Tholos B cannot be dismissed in this way. They are of a distinct type, and do not belong to the group with metal forms and a metallic glaze, which, it is admitted, still remained in use right down to the commencement of MM III.<sup>65</sup> The polychrome pottery of MM I *a* in this tomb is not so simple in nature; it can, and must, be compared with the closely similar pottery from the palace at Knossos and other sites. It is good chronological evidence, not to be disregarded.

The tomb also contained a sufficient number of seals to establish relative dating. They, too, belong to the MM I style, and were probably deposited at the same time as the pottery and the daggers. All the common forms of Cretan seal were represented: the cylinder,<sup>66</sup> the "hemi-cylinder,"<sup>67</sup> the "signet,"<sup>68</sup> the three-sided

<sup>56</sup> *VTM.*, pl. ix, no. 6859; height 4.5 cm.

<sup>57</sup> *VTM.*, pl. ix, no. 6861; height 5.5 cm.

<sup>58</sup> *VTM.*, pl. ix, no. 6863; height 7 cm.

<sup>59</sup> *PM.* i, p. 198, note 5.

<sup>60</sup> *Aegyptiaca*, p. 134.

<sup>61</sup> *ArchC.*, p. 121.

<sup>62</sup> *CGBA.*, p. 107.

<sup>63</sup> *PM.* i, p. 186; iv, i, p. 54.

<sup>64</sup> *BFC.*, p. 258.

<sup>65</sup> *ArchC.*, p. 114, pl. xviii, 4.

<sup>66</sup> *VTM.*, pl. xiii b, nos. 1051, 1087, 1092, 1104, 1113, 1129 (ivory).

<sup>67</sup> Ten were found, all ivory; not illustrated. The designs were geometric, irregular spirals or net patterns. Evans, *PM.* i, p. 196, considered them interesting "as fitting on . . . to a characteristic 'Egypto-Libyan' class of the Sixth to Tenth Dynasty Period."

<sup>68</sup> *VTM.*, pl. xiv, no. 1130; pl. xv, no. 1093; one not illustrated. Material not stated; presumably steatite.



prism,<sup>69</sup> the conical<sup>70</sup> and pyramidal<sup>71</sup> shapes. There were also mixed and rare types, apparently all of "stone," of some unspecified kind: two triangular, a bottle form with handle, a "pent roof" with circular base,<sup>72</sup> a three-sided prism with one circular and two oval sides,<sup>73</sup> the cloven hoof of an ox with design on the base,<sup>74</sup> half of a short cylinder split lengthwise with design on the oblong side,<sup>75</sup> a disk flat on one side and slightly arched on the other with design on both sides,<sup>76</sup> half a broad ring with long oblong bezel,<sup>77</sup> an elliptical shape with one side flat, one irregularly arched, both bearing designs,<sup>78</sup> and a small square slab with design on one side only.<sup>79</sup> Some of the designs are the same as elements of decoration found on MM I pottery, for example an S or Z form, repeated, at various angles. Such designs must have a special significance, and in some cases are identical with elements found on early pottery from Persepolis and Samarra,<sup>80</sup> but are not connected with anything contemporary, or even nearly contemporary in Western Asia. There is no reasonable doubt that all the seals are strictly contemporary with the polychrome pottery. Thus one distinctive and not uncommon element in design is that thought by Xanthoudides<sup>81</sup> to represent a scorpion. Evans treated this "disk or circle which springs from a tangential loop" as the forerunner of the "racquet and ball" pattern, and considered that examples of it are "probably not later than EM III."<sup>82</sup> But the design on the seal is clearly related to an element of the design on the decorated cup previously described. Similarly, Evans described the three-sided prism which has on one face fishes and on the second a single-masted ship with a rudder as "belonging to the end of EM III or the beginning of MM I."<sup>83</sup> This does not mean that these seals can be distinguished from other seals in the tomb group so far as the date of deposit is concerned.

As in the case of the pottery, so also in the case of the seals, an attempt has been made to prove that objects from the tombs in the Messara stand apart from general Cretan culture; dating of the seals, it is argued, must depend on comparisons with Asia Minor.<sup>84</sup> In particular, attention is called to the appearance on this group of seals of the concentric arrangement of animals, the *Tierwirbel*;<sup>85</sup> this is admitted to be connected with the "Early Palace period," and the general argument is not supported by this pattern, which is found at a very early date in Mesopotamia and Persia, and appears sporadically over a wide area through the centuries.<sup>86</sup>

<sup>69</sup> *VTM.*, pl. xiv, no. 1068; pl. xv, nos. 1076, 1099, 1011; one not illustrated. Presumably all steatite. This group shows a set of designs which may be related to similar designs in Western Asia. The combination on no. 1068 of the cross, swastika and 8-leaved rosette points to solar symbolism. The goat on the other three, and especially the combination of goat and scorpion on no. 1099, may also have astral significance and a long derivation.

<sup>70</sup> *VTM.*, pl. xiii b, no. 1052; pl. xiv a, no. 1061, another being an exact duplicate of this; one not illustrated. Material not stated.

<sup>71</sup> *VTM.*, pl. xiii a, no. 1035; pl. xv a, no. 1122. Material not stated.

<sup>72</sup> These types have not been illustrated.

<sup>73</sup> *VTM.*, pl. xiv a, no. 1079.

<sup>74</sup> *VTM.*, pl. xv a, no. 1088.

<sup>75</sup> *VTM.*, pl. xv a, no. 1074.

<sup>76</sup> *VTM.*, pl. xiii b, no. 1085.

<sup>77</sup> *VTM.*, pl. xiv a, no. 1073.

<sup>78</sup> *VTM.*, pl. xiv a, no. 1059.

<sup>79</sup> *VTM.*, pl. xiv b, no. 1070.

<sup>80</sup> E. Herzfeld, *Iran in the Ancient East*, p. 33.

<sup>81</sup> *VTM.*, p. 113.

<sup>82</sup> *PM.* ii, i, p. 216. In the illustration there, fig. 122 a is *VTM.*, pl. xv a, no. 1074, from Tholos B, not no. 1341, while 122 c is from *VTM.*, pl. xiii a, no. 1041, a perforated ivory seal of semicircular profile from hut 3.

<sup>83</sup> *VTM.*, pp. 114-115 and pl. xiv a, no. 1079; *PM.* i, p. 283, fig. 215 d a. Evans called the material steatite, Xanthoudides ivory.

<sup>84</sup> *BFC.*, pp. 265-272.

<sup>85</sup> *VTM.*, pl. xiii b, no. 1104; pl. xiii a, no. 1039.

<sup>86</sup> See Anna Roes in *IPEK.* xi, 1936-7, pp. 85-105.



Quite apart from the classification based on style <sup>87</sup> the epigraphical argument for dating the MM I group of seals earlier than the MM II class is very strong. There are, on MM I seals, symbols which were later used in the Cretan hieroglyphic system, but they never, on that group, form part of anything that can be called an inscription. Among MM II seals on the other hand, some, belonging presumably to the end of the period, bear undoubted inscriptions. There is no sign whatever of writing on the set from Tholos B. It is inconceivable that, if the last burial in the tomb took place after the introduction of inscriptions on seals, there should not be a single example of the inscribed type. It cannot be argued that Platanos was at this time out of touch with other parts of Crete; the appearance of palace pottery and objects imported from abroad proves the reverse. No system of chronology that does not permit for the lapse of a certain time, sufficient to allow of the development of the MM II form of writing before 1700 B.C., can be considered remotely probable, much less "a tremendous gain." It is not really possible, on archaeological evidence, to suppose that this group of seals was deposited in Tholos B after 1750; indeed, the earliest date possible is called for by this evidence.

One ivory object that has been classed with the seals must have been an amulet, whether it was used as a seal or not. It has the form of a boar's head resting on the front paws, with a design of spirals on the base.<sup>88</sup> The boar remained a subject proper for artistic themes in Crete till the Late Minoan age, but the use of a boar's head as an amulet is not comparable to the treatment in paintings, for it derives from magic, and ultimately from religious beliefs. In very few countries in the Near East would the use of such an object be permissible in ancient times, and it can hardly be thought probable that this form could be used in two countries there, unless the one borrowed from the other. Now the boar's head was used as an amulet in Babylonia at the time of the First Dynasty of Babylon; there is a good unpublished example, of haematite, in the British Museum. The ivory is of Cretan manufacture, an imitation of a form current, and surely contemporary, in Western Asia.

There were some half a dozen acknowledged amulets among the finds. Three were of steatite, one being in the form of an ox-head, while the other two were model legs and feet.<sup>89</sup> Of the three ivory examples, one was in the form of some unidentifiable beast, pierced through the back both horizontally and vertically, another had two birds' heads at the top corners of an amorphous shape and the third was an ox-head.<sup>90</sup> Some of these amulet forms were known in Babylonia at different periods. A headless ivory figure from the tomb, representing a woman in a flounced skirt and a bodice, holding her hands to her breasts, or perhaps folded below them,<sup>91</sup> was

<sup>87</sup> For a brief characterization and opposition of MM I and II seals see *ArchC.*, pp. 119-120 and 142-143.

<sup>88</sup> *VTM.*, pl. xiv a, no. 1086; *PM.* i, p. 119, and 118, fig. 87, no. 3 a b c. Evans wrongly says that this is from "the larger ossuary tholos," which would be Tholos A. For the boar in Syrian art, see the axe from Ras Shamra in Schaeffer, *Ugaritica* i, pl. xxii; it is early in Mesopotamia, *AJ.* x, pl. xii b; *BMQ.* xiii, pl. xxxviii a; Hall, *Babylonian and Assyrian Sculpture*, pl. i, no. 2.

<sup>89</sup> *VTM.*, pl. lviii, nos. 1143-1144.

<sup>90</sup> *VTM.*, pl. xv b, nos. 1145, 1146, 1147. The birds' heads amulet, in the same form, but with animal heads, was found at Tall Asmar, *OIC.*, no. 19, p. 24, fig. 24, and the bull's head, first found in the Tall Halaf period, *Iraq* ii, pl. vi a, continued in use till the First Dynasty of Babylon.

<sup>91</sup> *VTM.*, pl. xv b, no. 230; height 2.3 cm. The drawing is not good; no breasts are shown.



"probably worn . . . as a magical apotropaic amulet." The flounced dress was apparently introduced in MM I, for an ivory half-cylinder found near Knossos<sup>92</sup> provides the earliest representation of it; if there is any truth in the view of Evans that the introduction shows Babylonian influence—those who would explain the facts away as due to accidental resemblance make several assumptions at once—then this amulet from Tholos B is, like the boar's head, proof of direct Babylonian influence on Crete during a specific period, the First Dynasty of Babylon.

There was a large mass of beads in the tomb; the only gold object in the find was a bead of the shape called "amygdaloid."<sup>93</sup> No evidence for dating can be derived from the published account; there is no reason to suppose that the beads differ in date from the other objects.

The result of this examination of the material from Tholos B at Platanos is to show that, apart from a few tiny objects which belong to an earlier period, the objects found belong to a single period, that they were deposited within a comparatively restricted time, or possibly all at the same time, and that none of them therefore can antedate the sealing of the tomb by long. The explanation of the lack of metal given by Xanthoudides also accounts for the absence of earlier objects of any size; previous deposits were removed at each burial. In this respect Tholos B differs from Tholos A. In any discussion, this material should be treated as a unit; it permits precise chronological argument.

#### (4) *The Egyptian Scarabs*

There were three of these, all of white steatite. The earliest bore on its base the incised outline of an insect with six legs, surrounded by an ellipse.<sup>94</sup> The outline consists of two arcs with cross-line filling; the legs are indicated by double lines. Dr. Hall described this scarab as "ixth.-xth. Dynasty"; but this terminology indicated an archaeological stage rather than a precisely defined historical period. As Brunton has said of his classification of similar specimens from Badari: "These dates must not be taken too literally; they are only intended to indicate the sequence of various changes."<sup>95</sup> Pendlebury did, however, attribute this object to the First Intermediate period and supported the attribution by referring to a similar scarab from Badari.<sup>96</sup> The comparison seems to be perfectly justified so far as the back and legs of the scarab are concerned; but it should be noted that so far as can be judged from the illustration, the scarab from Badari has not such typically high legs as other specimens of the First Intermediate period, even those from Badari. The design, though closely similar, may indicate a later date for the Platanos specimen, for in the Badari example the body is simply a narrow rectangle with cross-line filling, and the double lines indicating legs have also cross-lines. There is no compelling reason to believe that this scarab is earlier than the xth. Dynasty. It has no chronological value.

<sup>92</sup> *PM.* i, p. 197, fig. 145. The representation differs considerably from that of the Platanos amulet. There are different Sumerian forms.

<sup>93</sup> *VTM.*, pl. LXVII, no. 502.

<sup>94</sup> *VTM.*, pl. xv a, no. 1124 (side view); Pendlebury, *Aegyptiaca*, pl. i, no. 55; *CGBA.*, p. 69, fig. 70. In *BFC.*, p. 269, it is stated that types like the scarabs from Platanos occur in Egypt from the xth. to the xviii. Dynasty. A glance at the illustration *BFC.*, p. 7, fig. 2, no. 9, from Hall, *Royal Scarabs*, plate opposite p. xv, no. 7, might have shown that there is no comparison save that in both cases an insect is depicted.

<sup>95</sup> G. Brunton, *Qau and Badari* i, p. 56.

<sup>96</sup> Brunton, *ibid.*, pl. xxxiv, no. 199.



The second and third scarabs were originally published by Sir Arthur Evans as Cretan imitations, owing to some misunderstanding.<sup>97</sup> The second has on the base a coil design, including running spirals. The legs seem, from the illustration, too low for any dating earlier than xiiith. Dynasty to be possible, and the design is so like many on the hoard of scarab impressions found by Reisner at Uronarti<sup>98</sup> that a reasonably certain limitation of date to the end of the xiiith. or the very beginning of the xiiiith. Dynasty is indicated. Dr. Hall called it both "ix-xth. Dynasty," using that expression of the archaeological period, and also "xith-xiiith. Dynasty," thinking of the historical limits; but he was influenced in adopting this nomenclature rather by his view of the other evidence than by the scarab itself.<sup>99</sup>

The design on the base of the third scarab shows the hippopotamus goddess, Thueris, one hand raised; behind her is an unidentifiable animal form, in front of a spiral.<sup>100</sup> This, again, was called "xi-xiiith. Dynasty" by Hall, and dated to the xiiith. by Evans and Pendlebury. Professor Newberry told me that the design might be consonant with a date in the xiiiith. Dynasty; the best comparison seems to be a seal that must belong to the beginning of the xiiiith. Dynasty.<sup>101</sup>

It does not seem probable that scarabs were sent to Crete in large numbers at any time. The circumstances at Platanos favor the view that the two scarabs belong to the same interment. There can be no reasonable doubt that they were deposited in the tomb with some of the Cretan material, not long before the sealing of Tholos B. That conclusion points to the date of the last interment as shortly after 1800 at the earliest. The MM I a pottery and the Cretan seals must be dated as early as possible, certainly well before 1750. Thus a precise dating is indicated for the last deposit in the tomb. It is impossible to suppose that any one object in the tomb is later than 1750 without completely disregarding the very strong chain of evidence.

#### (5) The Cylinder Seal

The Babylonian seal from Tholos B<sup>102</sup> is of haematite, the characteristic material for such things at the time of the First Dynasty of Babylon; the length, slightly under one inch, and diameter are also typical. Two-thirds of the circumference have been left blank for an inscription that was never executed, a not infrequent occurrence in seals. The proportion of space assigned on a cylinder for inscription, whether used or not, is a mark of date; on this ground alone the Platanos cylinder could not be supposed to belong to the earlier reigns of the First Dynasty of Babylon, the time of the Larsa supremacy. The cutting is good and carefully finished; there is no sign of the slip-shod workmanship, not uncommon at the end of the dynasty, after the time of *Abi-ešu'*, which left the drill-holes not thoroughly assimilated into the engraved modelling.<sup>103</sup> The preservation is such that the seal cannot have been long in

<sup>97</sup> *PM.* i, p. 199; iv, ii, p. 439, note 2.

<sup>98</sup> *BMFA.* xxviii, 1930, pp. 47-55. It is quite useless to compare scarabs of quite different form, e.g. Petrie, *Diospolis Parva*, pl. xli, no. 15, as is done in *BFC.*, p. 6, fig. 2, no. 6. Åberg's whole argument neglects significant differences.

<sup>99</sup> For illustration and discussion see *PM.* i, p. 200, fig. 149; *VTM.*, pl. xv, no. 1058 (side view); *CGBA.*, p. 69, figs. 70 and 71; *Aegyptiaca*, pl. i, no. 54; *BFC.*, p. 268, Abb. 508.

<sup>100</sup> *PM.* i, p. 200, fig. 148; *VTM.*, pl. xiv, no. 1075 (side view); *CGBA.*, p. 69, fig. 71; *Aegyptiaca*, pl. i, no. 56.

<sup>101</sup> Newberry, *Scarabs*, p. 88, fig. 93.

<sup>102</sup> *PM.* i, p. 198, fig. 146; *VTM.*, pl. 117; *CGBA.*, p. 107, fig. 125.

<sup>103</sup> For an extreme example, dated to the reign of *Samsu-dilana*, see *Iraq* vi, pl. iv, no. 26, and the



use. There are only two figures, again a mark of date; the earlier seals of the First Dynasty retain the themes of the Third Dynasty of Ur, which involve several figures, or accessories. Extreme simplification did not begin before the time of *Hammurabi*; it persisted till the Kassite period. The weather-god, who may be called Adad, Amurru or otherwise, wears a soft cap with an upturned rim, made perhaps of lamb's wool, and holds a mace to his middle with the left hand, while the right swings free; his fringed cloak is pulled up to the knees as befits a warrior. A goddess, his consort, stands before him in the attitude of intercession, both hands raised; she wears the divine crown with four horns and the flounced dress. This is a common scene on First Dynasty seals, known from a great many examples to be typical of the middle and end of the period; the attitude of the weather-god is characteristic. Hayes Ward told Sir Arthur Evans that this figure in this scene hardly appears before the time of *Hammurabi*. This statement by a great authority remains true, though collections of seals have considerably increased. For this reason Frankfort described the seal from Tholos B as in "the advanced style of the *Hammurabi* Dynasty."<sup>104</sup> The earliest example of the type known to me was, when I saw it, in the collection of Mr. R. S. Cooke, a finely carved cylinder of amethyst, dated by its inscription to the reign of Rim-Sin of Larsa. It is not possible to date the Platanos seal to any reign earlier than that of *Hammurabi*.

An attempt has been made to assign an impossibly low date.<sup>105</sup> The seal has been compared with one found by Dr. Schaeffer at Minat al Baidha,<sup>106</sup> said to be "late Mycenaean." The Syrian seal belongs to a class fairly common in the late fifteenth and fourteenth centuries, and presents two different scenes, the worship of the sun-god by a suppliant with a goddess interceding, and the stabbing of the bull-man by a "hero." This comparison is valueless and shows some ignorance of the mass of material available—inscribed seals, impressions on tablets and uninscribed seals from dated levels in excavations.

It is of some importance to note that the seal from Platanos is purely Babylonian in style. The same scene can, and does, appear on contemporary Syrian seals; but Syrian seals seem always distinguishable by some mark of origin. Seals and seal impressions from excavations in Syria that are contemporary with the reign of *Hammurabi* generally include some element derived from Egypt; it may ultimately be possible to tabulate the distinctive features. Though the Platanos seal doubtless reached Crete through Syria, it is a witness to direct intercourse between Babylonia and the island; there is nothing surprising in that, for documents from Ma'er list objects from Kaptara, certainly an island in the Mediterranean, probably Crete; a stone object bearing an inscription of a Naram-Sin who was king of a province on the Diyala in the time of the First Dynasty was found in Kythera,<sup>107</sup> and two other

description pp. 13-14. Frankfort *CyLS.*, p. 153, says that "a first removal of stone by the drill makes it impossible to produce the finer details by a subsequent use of the graver." I believe this to be a misconception; graving of hard stone to secure the shallowest relief would be impossible without the use of the drill, and failure to use it produces the scratched outlines of various decadent periods. Good is distinguished from careless work by restraint in the use of the drill and thorough working over with the graver. See Gadd in *JRAS.*, 1941, p. 84.

<sup>104</sup> *CyLS.*, p. 302, note 2.

<sup>105</sup> *BFC.*, pp. 13, 270.

<sup>106</sup> *Syria* xiii, pl. xi, no. 1, fourth down; *ILN.* 1931, p. 106, fig. 4.

<sup>107</sup> The latest account with references by Weidner, *JHS.* lix, pp. 137-138.



cylinders reached Crete, one from some unknown place probably before the time of *Hammurabi*, the other from Babylonia, shortly after his time.

One was found in the palace at Knossos, not quite half a meter lower, and therefore presumably earlier, than the MM III stratum.<sup>108</sup> It is of lapis lazuli, over an inch long and about half an inch in diameter, with gold caps at both ends. Unfortunately, only a misleading drawing has so far been published; I have seen a photographic print which gave a substantially different impression, but was still inadequate. In the lower register the bull-man, marked as a minor deity by a single pair of horns, holds on either side bulls, themselves grouped, in one case with a crossed lion and bull, in the other with a lion, in the usual manner; a female figure, whose lower garment consists of a series of flounced bands of cloth with a vertical ripple, while the upper garment is represented by hanging horizontal bands, possibly necklaces, across which a band falls diagonally over the left shoulder, holds one bull by a string attached to the fore-paw. In the upper register there are (1) a four-pointed star with rays between the points, enclosed in a disk with the crescent below, (2) a winged animal of uncertain type, *couchant*, (3) a small profile head, (4) an arc with saw edge, (5) another animal, perhaps a goat, the head lost, (6) a lion-headed bird with human (?) legs, (7) a squatting sphinx, (8) a lion's head, (9) a dragon's head. Evans, advised that this seal was probably earlier than *Hammurabi*, and connected with the Agade tradition which persisted down to the commencement of the Larsa Dynasty, gave an impossible absolute date, "approaching 2400 B.C." M. Dussaud believes that the seal, though depicting themes derived from Babylonia, cannot have been made there; in his view the cylinder must have been made in northern Syria or Asia Minor and is not older than the end of MM II.<sup>109</sup> Frankfort thought that the seal belongs to a group of Syrian seals later than the time of *Hammurabi*; his argument depended on the appearance of the sphinx, the "griffin" and what he considers a full face wrongly represented in the drawing as a lion's head.<sup>110</sup> There is room for considerable disagreement with these opinions. The Cappadocian tablets are much earlier, not later, than *Hammurabi* and some re-adjustment is requisite. The Knossos cylinder has nothing in common with the local seals on the tablets, but is vaguely comparable to impressions of Babylonian seals on them. It is not comparable at all to any Syrian seals of later date. Under these circumstances, the decisive element in dating must be shape and material, and is in favor of a date earlier than *Hammurabi*.

The other Babylonian seal was found on the western outskirts of Candia.<sup>111</sup> The material is haematite, but the size does not seem to have been stated. The scene consists of five human figures, in two groups of two, with a magical figure between. One group represents the weather-god before his consort, almost exactly as on the Platanos seal; the other shows the sun-god with the saw-edged knife stepping on to

<sup>108</sup> *PM.* iv, i, pp. 423-424, figs. 349-350.

<sup>109</sup> *Iraq* vi, p. 59.

<sup>110</sup> *CylS.*, p. 302, note 3. Frankfort himself published, *OIC.*, no. 19, p. 30, fig. 33, in the year of the publication of the seal from Crete by Evans, a fragment in which the bird holding animals, that cannot be distinguished from the lion-headed eagle, is provided not only with bird-legs, but also with a pair of human legs. Frankfort rightly cited Heinrich and Andrae, *Fara*, pl. 54 f. On the very different birds on Syrian seals, see Contenau, *La Glyptique Syro-Hittite*, pp. 141 ff. They are generally represented in profile.

<sup>111</sup> *PM.* ii, i, p. 265, fig. 158; the version of the inscription, repeated by Frankfort, is part misprint, part error.



the horizon as a human worshipper brings the offering of a goat, with the symbol of the moon, the full disk and crescent, between. The magical figure is the naked bearded "hero," full face, carrying a pot. The cutting is summary and the assimilation of the drill holes to the modelling is not always finished, but the style is not so completely degenerate as in seals belonging to the extreme end of the First Dynasty. There can be no doubt about the provenance, for there is an inscription: "*Awel-Ištar*, son of *Marduk-mušalim*, servant of Nabu" was a Babylonian by birth, as the father's name proves.

It is clear, then, that Babylonian seals reached Crete. The exact course of seal design in Syria, which has still to be established from unpublished material, ought not to affect the dating of the seal from Platanos, which, like that of the two others, can be expressed in terms of Babylonian chronology, whatever the route to Crete may have been.<sup>112</sup> For that reason the seal from Tholos B has always been of importance, since its discovery, in discussions of the absolute dating of MM I. Unfortunately there has been a serious lack of co-ordination between the two subjects, Babylonian chronology and Cretan archaeology, even quite recently. In 1921<sup>113</sup> Evans adopted the date for *Hammurabi* proposed by the late Father Kugler in 1912 as the most probable of several alternatives, though even in 1921 there were serious arguments against it. Kugler himself, in 1923, admitted the necessity of a great reduction in his previous chronology, but the application of reduced dates in the particular case of Tholos B at Platanos, published in 1928,<sup>114</sup> received no attention. In 1935<sup>115</sup> Evans still dated the cylinder from Platanos "on an astronomical basis" about 2123 B.C., instead of about 1900 B.C., the date accepted by most Assyriologists. In 1939 Pendlebury still felt able to say that the date of the seal "can be reasonably fixed to the period of Hammurabi, i.e. about 2100 B.C.,"<sup>116</sup> although the discoveries of M. Parrot at *Ma'ar*, Tall Hariri, had before then proved conclusively that *Hammurabi* came to the throne in Babylon after the accession of *Šamši-Adad I* in Assyria; the probable date for *Hammurabi*, about 1800, had been given long before Pendlebury's publication,<sup>117</sup> but had again been overlooked or neglected. The true position is not that assumed in the text-books. It is no longer possible to suppose that the Egyptian scarabs were deposited very early in the period to which they belong, as Hall wished to do,<sup>118</sup> on the evidence of the Babylonian cylinder. The position is rather that the seal must be given the latest possible date that the other material in the tomb will allow. The Cretan material has been shown to prove that the last deposit in the tomb must be dated well before 1750.

It is not possible to suppose that the cylinder seal may be later than anything in the tomb, and its presence there an accident. This is not a case for the application of Rhys Carpenter's "law of the single sherd,"<sup>119</sup> though that must always be borne in

<sup>112</sup> P. Demargne, *Crète et Orient au temps d'Hammourabi* in *RA*, 6e série, viii, 1930, pp. 84-85, thinks they went by way of Cyprus. The odd thing is that there is no strong indication of Cypriote connections with Crete at this particular time, and nothing certainly belonging to Babylonia in the time of *Hammurabi* has been found in Cyprus. The cylinders said to have been found in the "Temple Treasure" of Kurium by General di Cesnola have never been adequately published; nothing in the drawings by Sayce, *TSBA*, v, pp. 441-4, points to a date earlier than 1700 B.C., much to a date after 1600 B.C.

<sup>113</sup> *PM*, i, pp. 189, 202.

<sup>114</sup> *Early History of Assyria*, p. 203.

<sup>115</sup> *PM*, iv, i, p. 54.

<sup>116</sup> *ArchC.*, pp. 121-122.

<sup>117</sup> *AJ*, xix, p. 46.

<sup>118</sup> *CGBA.*, p. 107.

<sup>119</sup> *AJA*, xlii, p. 59.



mind. Tholos B was not entered by tomb-robbers after its collapse; the circumstances of the finding and excavating of the tomb preclude any such assumption. Had there been tomb-robbers, they would not have dropped a single seal, and that Babylonian. Any theory of accident is excluded, because among the Cretan amulets in the tomb there are examples showing a Babylonian influence that must be contemporary with or slightly earlier than the seal. Tholos B provides a fairly exact cross-dating: MM I a — end of xiiith. or very beginning of xiiiith. Dynasty of Egypt — reign of *Hammurabi*. The archaeological chain of evidence is very strong, and is supported by the evidence at Ras Shamra and 'Atshanah.

Recently two new schemes of Assyrian chronology have been proposed. The first would reduce the date of *Šamši-Adad* I to 1726–1694, reckoning in Assyrian years.<sup>120</sup> Since the son of *Šamši-Adad* was ruling at *Ma'er* at least 46 years before the thirty-second year of *Hammurabi* of Babylon,<sup>121</sup> the accession of the Babylonian could not fall before 1712 (Assyrian). Albright<sup>122</sup> considers this date too low, and proposes to date *Hammurabi* 1728–1686 B.C. (Julian). The first system would mean that the Babylonian cylinder seal could not have been deposited in Tholos B till after 1700 B.C.; the second, that it could not have been deposited before 1715 B.C. The argument in support of the first system is an interpretation of the still (regrettably) unpublished king list from Khorsabad aiming at a reconciliation of apparently incompatible statements by Assyrian kings about distant predecessors. Since it has been stated<sup>123</sup> that the Khorsabad list "is complete, with regnal years, back into the fifteenth century and . . . there are only two uncertain reigns after the eighteenth century B.C.," it is of some importance in the present connection to distinguish what the Assyrian king lists prove from accretions due to interpretation. This is a delicate matter, since inferences have been based on a text without exact communication of the complete text, and also because we have been warned against publishing "first thoughts."<sup>124</sup> But the position actually is that the exact contents of the king list as communicated have already been misunderstood, and it is desirable that a system of chronology which does not satisfy all the conditions should not be accepted at more than its conjectural value.

#### (6) *The Assyrian King List*

The Khorsabad king list, so far as the information in it has as yet been vouchsafed to us, covered the reigns of 107 kings. The length of reign of the first 32 is not stated, an admission of ignorance that is exceptional in this class of document, and rather an impressive testimony of good faith. The lengths of reigns for the rest are generally given in precise figures; but these figures are missing in eight cases, the thirty-third to thirty-seventh, sixty-first, sixty-fifth, and sixty-sixth kings, owing to damage to the tablet. The figure for one of these reigns, the sixty-first, can be restored from a fragment which probably came from the city of Ashur. In the case of

<sup>120</sup> *JNES*, i, pp. 247–306, 460–492 and ii, pp. 56–90.

<sup>121</sup> G. Dossin in *Syria* xx, pp. 104–105: "Nous avons relevé huit noms d'années pour le règne de Iahdunlim, seize noms de *limu* et quatre noms d'années pour le gouvernement assyrien de Iasmah-Adad. Quant à la durée du règne de Zimrilim, elle paraît avoir atteint les trente ans, à en juger par le nombre de noms d'années que nous avons recueillis."

<sup>122</sup> *BASOR*, 88, Dec., 1942, pp. 28–33.

<sup>123</sup> *AJA*, xlvii, p. 491.

<sup>124</sup> *JNES*, ii, p. 85.



eight other reigns, those of the forty-second to forty-seventh, the eighty-fourth and eighty-fifth kings, the exact length is not given.

The Babylonian calendar was adopted for official use in the reign of Tiglathpileser I, apparently for the first time; over a long period of years that calendar remains equivalent to Julian years in reckoning, for first Nisan was only on rare occasions allowed to fall before March twentieth without correction by intercalation, and this system was maintained from an early period. But the Assyrian calendar previously in use shows considerable variations from the Babylonian, and no precision in converting Assyrian years into Julian reckoning is possible. It may be that the facts can be accounted for by a different and inferior system of intercalation, but the known facts at present favor the view that there was no intercalation at all.<sup>125</sup> This is an important factor in calculating early dates.

The last or one hundred and seventh king in the Khorsabad list is *Aššur-nirari v*, 754-745 B.C. The list allows 321 years for the 19 kings who reigned between Tiglathpileser I and *Aššur-nirari v*, and this is said to correspond satisfactorily with the already published eponym or *limmu* list which is too broken to fix dates precisely. The combined evidence seems to fix the 39-year reign of Tiglathpileser to the years 1114/3-1076/5 B.C., possible errors of conversion into Julian years excepted.

No exact figures are given for the reigns of *Mutakkil-Nuski*, the eighty-fifth king, grandfather of Tiglathpileser, or for his predecessor and brother, *Enurta-tukulti-Aššur*. Instead, there is the statement in each case, *t/duppišu šarruta epuš*, "he exercised kingship during his *t/duppu*." The meaning of this word is known from a fair number of instances, where it is found in slightly different, but stereotyped, phrases.<sup>126</sup> In a loan of money that is to be free of interest for a given period, the clauses read: "There shall be no increase of capital from the fourth Marcheswan until Teshri. There is no interest, *hubullu*, through his (or its) period, *adi t/duppišu*. If the debtor does not return the money to the creditor at the end of Teshri, there shall be increase of half a shekel (a month)." Here, clearly, the word denotes a period amounting to a calendar year, but that does not mean that the period is always a year. There is some doubt whether the pronoun refers to the debtor or the contract. From meaning "a period," the word comes to be used in contracts where the precise term of validity is not named; "the agreed period," "the term of the contract." Thus a house may be at a man's disposition, or he may be allowed to dwell in a house *adi t/duppišu*, "through his (or its) agreed period," the period. A father hires out his daughter in payment of a loan *adi t/duppišu*, through the agreed period of his contract. Some contracts were automatically renewable for fixed periods, unless cancelled at the termination of any one period. Thus rent is paid on barrels "through one period, another period," *adi t/duppi t/duppi*, that is, by periods. There is a slight variation in wording when one man lets his house to another *adi t/duppi ana*

<sup>125</sup> See E. F. Weidner in *Afo*. x, pp. 27-29, a valuable study which ought to have been mentioned in any preliminary statement on the list.

<sup>126</sup> Discussions by Landsberger in *ZA*. (NF) v, p. 291, and by L. Oppenheim in *RA*. xxxiii, pp. 143-151. All the references quoted here are given in the latter article. Oppenheim's derivation from *ṭawafa* will not do; Landsberger considered it a loan-word from Aramaic, and this is probably right. The Arabic *ṭaff(un)*, *daff(un)*, "part of a thing," "part completing a measure," indicates a literal translation, "a bit (of time)."



*t/duppi*, "through one period to another period;" the lease is to be continued if the loan of a capital sum is renewed. Men may act as guarantors against a slave running away or being claimed for the *corvée* of the king *adi t/duppu ana t/duppu*, through periods automatically renewed. As an agreement was made *ana t/duppi t/duppi*, for agreed periods, a clause in it deals with the time of expiry as *arki t/duppi t/duppi*, "after one period, another period," that is, on cancellation. When a debtor agrees to pay silver according to the capital sum *ina t/duppišu*, "at his period," this does not warrant any conclusion that *t/duppu* can indicate a point of time, e.g. the turn of the year; the term still indicates a definable length of time not actually fixed. Naturally such a word can be defined by a genitive. In an astrological text there is an omen, "If Venus should enter the moon *adi t/duppi šatti* through the period of a year," that is before a year has passed. Another reads, "If the moon is seen with the sun on the fifteenth (of any month) the heart of the land shall be good *adi t/duppi šatti* through the period of a year," till a year has passed.

The word can also be used as an adverbial accusative denoting extension of time. A woman undertakes to feed an apprentice on stated rations for five years *t/duppi t/duppi*, that is, during each period before cancellation on either side. A man can say *t/duppi t/duppi maršaku*, "I am sick during one period, during another period," that is, not continually, but intermittently. There is a negative construction too. A scribe declares that the gods know that he has not sent certain wooden objects (?) *t/duppi u t/duppi* "during one period and then another," that is, he has not sent at irregular intervals. In the Khorsabad list's statement about 8 kings, the two mentioned and six usurpers, *t/duppišu šarruta epuš*, the evidence seems to prove that the words mean "he exercised kingship during his period." There is nothing to define the length of these reigns in the wording; had the scribe known, he would have stated the number of years, or months, or even days. The reason why the exact length could not be stated is not obscure. The reigns of *Enurta-tukulti-Aššur* and *Mutakkil-Nusku* were exceptionally troubled. The period when 6 usurpers ruled one after the other, the forty-second to forty-seventh kings,<sup>127</sup> was equally a time of which no precise record might be available.

It has been stated that the "complete disregard of the DUB-*pi-šu* reigns in the computations of the royal chronologers proves that DUB-*pi-šu* means not 'an unknown time' or 'a short time' and not 'two years' or 'one year.' Unquestionably DUBpu is a term for the portion of the last king's last year after this king's death."<sup>128</sup> On this assertion the chronological system proposed in this interpretation of the Khorsabad list is based. But the only computation of an Assyrian "chronologer" that can be used without violent alteration to fit this interpretation is that of Esarhaddon. Even in that case an adjustment is necessary—an adjustment pos-

<sup>127</sup> In this case the text runs, "6 kings, sons of nobody. *BAB t/duppišu šarruta epuš*. (Each one) exercised kingship during his period. . . ." That *t/duppišu* must be taken in exactly the same construction as in the other cases seems certain. The translation "at the beginning of his DUBpu" leaves the absence of preposition unexplained, the sense of *bab* unexampled, and the factual meaning incomprehensible. After six kings had ruled in a single year, what is the "beginning of the DUBpu"? If a reign lasted only a few weeks, or even days, why in this connection should the 'beginning' have any importance? If a preposition is missing, then *ina babi*, "in the gate," might mean that each had juridical and administrative powers but no religious sanction.

<sup>128</sup> *JNES*. i, p. 296, note 130.



sible only because the Khorsabad list is corrected in one case by comparison with a fragment of a similar list.<sup>129</sup> In seven cases the fragment gives the same figures as the Khorsabad copy, in four cases the figures are not well enough preserved on the fragment for certainty, in one case the fragment preserves a figure lost on the Khorsabad copy; in two cases the fragment clearly differs, giving 13 where Khorsabad has 3, for the eighty-second king, and 4 where Khorsabad has 3, for the seventy-ninth king. The ordinary precept of criticism in the absence of decisive criteria would be to follow one list or the other. The interpretation that decides the meaning of *t/duppu* to be something unexpected uses the 13 in preference to the 3, for a precise arithmetical calculation, but rejects the 4 for 3. The king list, with this alteration, allows 579 years between the end of the reign of *Šamši-Adad* I and the first year of Tiglathpileser I, 1114 B.C., that is, apart from two reigns for which figures are lost, and the eight reigns that are to be disregarded. The last year of *Šamši-Adad* I is then 1694; but it is not the year given by either extant copy of the list. Esarhaddon, 680/79–669/8 B.C., states that 434 years elapsed between the reconstruction of a temple by *Šamši-Adad* I and that by Shalmaneser I, and that 580 years after Shalmaneser he himself repaired it; this calculation would again give 1694 (Assyrian) as the year of some building work. It is assumed that the reference is to completion of the building, but that is not in the inscription. In any case, Esarhaddon must have been using building records, not the king list.

Esarhaddon's statement flatly contradicts Shalmaneser I's own inscription, for that allows 580 years between *Šamši-Adad* I's work and Shalmaneser's, 146 Assyrian years more than Esarhaddon gives. This should mean that *Šamši-Adad* began his building work 562 Julian years before Shalmaneser's reconstruction, that is before 1810 B.C. On this point the interpretation of the Khorsabad list presents a most ingenious theory; it would only be of value for chronological purposes if the Esarhaddon statement could be proved correct. Shalmaneser I states that the interval between *Erišu* I and *Šamši-Adad* I amounted to 159 years. It so happens that the difference between the total of the regnal years still preserved on the Khorsabad list for the kings between *Šamši-Adad* I and Shalmaneser, namely 421, and Shalmaneser's total of 580 is also 159. This coincidence leads to the hypothesis that Shalmaneser really meant that *Šamši-Adad* I was 580 less 159 Assyrian years before him. It was not necessary to await the discovery of the Khorsabad list to discover that  $580 - 159 = 421$  is tolerably close to 434. The question is rather, does the Khorsabad list justify Esarhaddon as against Shalmaneser I? The answer is, only in the improbable event of ten reigns, all recognized in the royal canon, covering less than 22 months. But the interpretation uses the Esarhaddon statement to prove that these reigns were not counted. This is argument in a circle.

Professor Albright does not credit Esarhaddon's statement, for he allows twenty years for the reigns of the sixty-fifth and sixty-sixth kings. Once that is done, Esarhaddon's figures are no longer exact, 1694 (Assyrian) ceases to be the last year of *Šamši-Adad* I and to have special significance for the explanation of other royal inscriptions, and the argument that the word *t/duppu* must be equivalent to *reš šarruti* "the beginning of kingship" fails completely. But if *t/duppišu* does not

<sup>129</sup> *AfO.* iv, pp. 1–11.



indicate a precise period, it is no longer true that "there are only two uncertain reigns after the eighteenth century B.C." There are ten, and the argument advanced for the second system of chronology also fails. The fixed dates given by it assume that Assyrian years can be equated with Julian years, probably an error, and that the Venus observations of the time of *Ammizaduga* included in omens can be used as historical evidence. That is an incorrect use of these omens, which can only fix dates if on other grounds the reign of *Ammizaduga* can be limited to a period within a year or two of a possible astronomical solution of the date of the observations. The omens have in this case, as in so many others, been "completed" by statements not based on observation at all, and no solution must be accepted without a close approximation to it having been arrived at by other means.

Before the interpretation of the Khorsabad list which sets out a precise chronology is accepted as authoritative by students of other subjects, a stronger case ought to be presented. There are strong arguments against it in its present form. Albright has pointed out that the system would appear to require too late a date for the Hittite raid against Babylon; that date must be judged not by figures or dates in documents only, but by known facts about history in various lands, and the changes in different languages. But the system presents another untenable date, that of *Aššur-uballiṭ*, 1362–1327 (Assyrian). If Assyrian years before 1114 B.C. were lunar, *Aššur-uballiṭ* in this system ruled about 1355/4–1320/19 B.C. (Julian). That is impossible. *Aššur-uballiṭ* corresponded with Amenhetep IV (Akhnaten), whose reign cannot be later than 1375–1358 B.C. (Julian), on any reckoning, and may be a few years earlier. Even if it is supposed that the Assyrian years 1362–1327 can be equated with the Julian years 1362/1–1327/6,<sup>130</sup> the historical conditions are not satisfied. The second letter of *Aššur-uballiṭ* shows that before 1358 B.C. the Assyrian claimed to be the "brother" of the Pharaoh, though he did not do so in the first letter, obviously sent with a gift of greeting shortly after his accession. The assumption of equality could only be possible after the gains from Mitanni which are known to have fallen after the death of *Dušratta*, some time before the re-instatement of *Mattiuaša*; the commencement of *Aššur-uballiṭ*'s conquests cannot be much later than six or seven years after *Amenhetep*'s accession, say 1368 B.C. at latest. This means that, if Assyrian years coincided with Julian, the reigns of *Enurta-tukulti-Aššur* and *Mutakkil-Nusku* together must have lasted about 6 years; if the years were lunar, that number becomes 13. This is surely evidence that *t/duppu* cannot have the meaning given in the interpretation of the Khorsabad list. If it is thought that Egyptian chronology can be neglected because it is impossible to be precise to a year, the answer is that considerable certainty exists about the lowest possible dates.

The evidence can be used in quite a different way from that presented by the interpretation. Tiglathpileser I states that 701 years elapsed between the work of *Šamši-Adad*, the son of *Išme-Dagan*, on the Anu-Adad temple and his own; that would mean that the year 1815 (Assyrian) fell in the reign of *Šamši-Adad* III. If the

<sup>130</sup> This assumption is made tacitly in BASOR. 88, p. 30, and the synchronism is regarded as so satisfactory that it is treated as a proof that the dates given in the interpretation of the Khorsabad list are approximately correct for the fourteenth century. The inconvenient consequence of using Babylonian years when giving early dates (said in JNES. i, p. 289, n. 115, to be "the only sensible method"), has obviously been misunderstanding and confusion.



Assyrian years were lunar, this year would be about 1794/3 B.C. (Julian). The figures in the Khorsabad list for three of the five reigns, the eighty-second to eighty-sixth, preceding 1114 B.C. amount to 67; the fragment corrects this to 77. If Assyrian years were lunar, and the reigns of *Enurta-tukulti-Aššur* and *Nutakkil-Nusku* covered 13 Assyrian years, the death of *Enlil-kudur-ušur*, the eighty-first king, fell in 1204 (Assyrian), or about 1201/0 B.C. (Julian). Since the thirty-second Kassite king died in the same battle as *Enlil-kudur-ušur*, in the five hundred and forty-fourth year of the Kassite dynasty, the first year of that dynasty is about 1744/3 B.C. (Julian). The first year of the Kassite dynasty fell during an invasion of the eastern provinces of Babylonia, which was temporarily defeated on or near the Diyala by Samsu-iluna in his eighth year. Given that the eighth year of Samsu-iluna is within a year or two of 1744/3 B.C., either earlier or later, the solution of the astronomical observations of Venus in the *Ammizaduga* omens which places the reign of Samsu-iluna in the years 1749–1712 B.C. is good evidence for fixing the reign of *Hammurabi* to the years 1792–1750 B.C. *Šamši-Adad I* must have come to the throne in Assyria before 1806/5 B.C. It is reasonable to suppose that there is a simple mistake in Tiglathpileser's statement; the *Šamši-Adad* intended is not the son of *Išme-Dagan II*, *Šamši-Adad III*, but the father of *Išme-Dagan I*, *Šamši-Adad I*. Since Shalmaneser I's date for *Šamši-Adad I* falls before 1810 B.C., the principal documents all point to a date about 1812/1–1790/89 for this 33-year reign. The only statement at present known not reconcilable with this dating is that of Esarhaddon.

This conclusion would accord with the evidence from Ras Shamra and 'Atshanah, which does not permit of any long interval between the end of the reign of Amenemhet III and the reign of *Hammurabi*. If it is argued that the archaeological material is inferior in historical value to the Khorsabad list, there are two answers which it is important to state firmly. The first is, that the Khorsabad list, so far as the contents have yet been communicated, is not against the date 1812/1–1780/79 B.C. for *Šamši-Adad I*; what is against the dating is an interpretation which forces that list into agreement with the possibly erroneous copy of an inscription of Esarhaddon. The second answer must be that, even if the figures in the Assyrian king list gave a total number of years that conflicted absolutely with the dating, the value of the other evidence is not affected and must be taken into account. It is idle to base absolute chronology on mere jugglery with figures. The task is to use manifold evidence. The Assyrian king list is a remarkably reliable document of its kind; but it must be critically tested at every possible point. An interpretation of the king list based on daring hypotheses certainly need not be considered to outweigh the evidence in the tomb at Platanos.

(7) *The Absolute Date of MM I a*

There is good reason for dating the last deposit in Tholos B at Platanos between 1800 B.C. and 1750 B.C. at the very latest. A reasonable approximate date would be, say, 1775. The material from the tomb, with the exception of a few tiny pieces, must have been deposited, if not together with, then within a comparatively short time of, the last burial. Other pottery which Sir Arthur Evans classed with the special type of polychrome ware found in the tomb cannot be separated much in time from



the group in the *tholos*. The inevitable inference is that this particular class of MM I *a*, but not necessarily all MM I *a*, must be dated to the second half of the nineteenth century B.C., precisely the same time at which MM I *b*, MM II *a* and MM II *b* can all be shown to have been in use. The doubt that Xanthoudides expressed as to whether the group in the tomb was MM I or MM II has a bearing on this problem. It may be that this particular group should be removed from the MM I *a* class altogether. But the seals, amulets and daggers in the tomb have always been treated as typical MM I. The lowering of the date of Tholos B radically alters the orderly progression of the text-books; it will not be easy to adjust long-formed opinions and prejudices to the telescoping of the MM I-II periods that is involved.

The lower dating of the main part of the material from Tholos B carries with it an inference which is as nearly certain as an inference can be. Tholos A contained Cretan material of precisely the same kind as that associated with the Egyptian scarabs and the Babylonian cylinder seal in Tholos B, and must therefore have been in use till about 1800 B.C. or even a little after. It also contained objects which are classed as EM II and III. These *tholoi* are thought to have stood free. Whatever the roofing may have been, whether a dome, as Xanthoudides and many others have thought, or a thatched or flat roof, as Pendlebury argued, such constructions, though they may stand for a long time, cannot last for many centuries, however often the upper part was repaired. The usual date for the end of EM II given in the text-books is about 2400 B.C. Can Tholos A have stood more than 600 years? Some revision seems necessary. It may be that the EM period lasted longer in the plain of the Messara than has been supposed, as in the case of EM III in eastern Crete. Other exceptional circumstances may explain the facts. Whatever the explanation may be, a re-examination of the chronology of the early periods is required, more particularly as the import of stone vases from Egypt during the Old Kingdom seems assured. For the chronology of Egypt before the xith. Dynasty remains completely uncertain; Eduard Meyer's system for the early period has collapsed, and with it must go all attempt to be precise till there is more evidence. The assumption that a Sothic period began with Zoser is no more than a plausible guess.

The reduction in date of the polychrome pottery from Tholos B may perhaps throw light on a curious problem. Some pots found at Megiddo, of local ware, and of a well-known Syrian and Palestinian shape, belonging to the twentieth century B.C., are remarkable for a decoration of wavy lines between bands done in white paint.<sup>131</sup> Nothing can be inferred from the pattern alone, since this might occur anywhere; what is remarkable is the technique, combined with the pattern. There are imitations of Cretan ware from Egypt<sup>132</sup> and from Ras Shamra.<sup>133</sup> This Palestinian ware may be an imitation too, of contemporary MM I pots; for an absolute date between 2000 and 1800 B.C. covers, probably, all the MM I material in the *tholoi* of the Messara.

BRITISH MUSEUM, LONDON

SIDNEY SMITH

<sup>131</sup> Guy and Engberg, *Megiddo Tombs*, pl. 88, no. 3; pl. 91, nos. 22-26; pl. 102, no. 4; pl. 123, no. 3. See also the discussion pp. 148-9.

<sup>132</sup> *PAP.*, p. 95; there considered Anatolian in origin.

<sup>133</sup> Schaeffer, *Ugaritica*, fig. 68, dated to late sixteenth century, p. 72.



## HONOS and VIRTUS

THE two figures which guide the horses of the quadriga in the triumphal procession on the Arch of Titus have been identified by most scholars as Roma and Genius Populi Romani (fig. 1).<sup>1</sup> Wieseler made the same identification for three cameos of the fourth century A.D. which also portray a triumphal procession.<sup>2</sup> One of these was in the Biehler collection near Vienna from 1879 to 1890, and then was sold to a private collector in Philadelphia (fig. 2).<sup>3</sup> The second cameo was found in southern France and was sold by a dealer from Lyons to von Sacken in 1869 and therefore ought to be in the former Münz- und Antiken-Kabinet, now in the Kunsthistorische Museum (fig. 3).<sup>4</sup> The third was in the Hawkins Collection, Bignor Park, was exhibited in 1864 in the South Kensington Museum, where it was seen and described by Conze,<sup>5</sup> but has never been reproduced.

All three gems have disappeared, probably as a consequence of a severe attack by Petersen,<sup>6</sup> who believed that all three were modern forgeries of the eighteenth century, based not directly on the Flavian relief of the Arch of Titus, but on drawings of it by Bellori in Bartoli.<sup>7</sup> His arguments, however, do not seem valid to me for the following reasons: (a) He believes that the Emperor ought to hold a scepter in his left hand, and not a scroll. But the scroll is necessary for the triumph. On it are listed the conspicuous acts and successes which have occasioned the granting of a triumph. We find such a scroll also in the hand of Titus on the Arch (fig. 1) and in the hand of Tiberius on the Gemma Augustea in Vienna,<sup>8</sup> on which he is shown descending from his triumphal car, which is led by Victory. (b) Petersen thinks that the laurel branch in the hand of the figures to the left of the quadriga is too short. But this is due to inferior late Roman workmanship. (c) He suggests that the branch ought to be held in the right hand, not in the left. But the branches in the hands of men, women, and children in the procession of the Ara Pacis are also held

<sup>1</sup> Eugénie Sellers Strong, *Roman Sculpture*, p. 109, pl. 43, 1; *Roman Art* ii, pp. 53 ff.; Lehmann, in *BullComm.* 62, 1934, pp. 89 ff., pl. III.

<sup>2</sup> Wieseler, "Über einige beachtenswerte geschnittene Steine des 4. Jh. n. Chr.," *Göttinger Gesellschaft der Wiss., Abh. hist.-phil. Kl.* xxx, 1883, no. 6, pp. 1 ff., figs. 1-2; Bernoulli, *Röm. Ikon.* ii, 3, p. 230.

<sup>3</sup> Wieseler, *op. cit.*, fig. 1. Rollet, "Eine römisch-antike Kaisergemme" in *Römische Quartalsschrift* xiii, 1899, pl. 138 ff., pl. x, 2. H. 0.11, B. 0.15m. Dark brown sardonyx with white spots.

<sup>4</sup> Wieseler, *op. cit.*, fig. 2; Eichler, in Eichler and Kris, *Die Kameen im Kunsthistorischen Museum*, 1927, p. 22, n. 1, mentions the cameo among "abschreckende Fälschungen," frightening falsifications. He, as well as Furtwängler, *Gemmen* iii, p. 360, n. 1, are influenced by Petersen (cf. note 6, below). Eichler dates the cameo ca. 1700 A.D., using as a *terminus ante quem* the cameo illustrated in Baierus-Ebermayer, *Gemmarum Thesaurus*, Nürnberg, 1720, pl. xxx. This cameo, the setting of which is doubtless modern, is different again, however, from the other four cameos and may be a fifth example of the fourth century A.D. It is closer in design to that of the Arch of Titus than to Bellori's drawing in Bartoli, from which Petersen believes these cameos to be derived. It has more space above the figures and an additional figure to the right, like the arch.

<sup>5</sup> Conze, in *AA.* 1864, p. 167; Michaelis, *AZ.* 1874, p. 12; *Ancient Marbles in Great Britain*, p. 213.

<sup>6</sup> Petersen, "Moderne Kaisergemmen," *RM.* 14, 1899, pp. 244-250. Eichler and Furtwängler agree with him. Cf. note 4 above.

<sup>7</sup> Bartoli, *Admiranda Urbis Romae*, pl. VIII (drawing by Bellori); *Veteres Arcus Aug. Triumphis Insignes*, 1690, pls. I-II.

<sup>8</sup> Eichler-Kris, *op. cit.*, pp. 52 ff. no. 7, pl. 4.



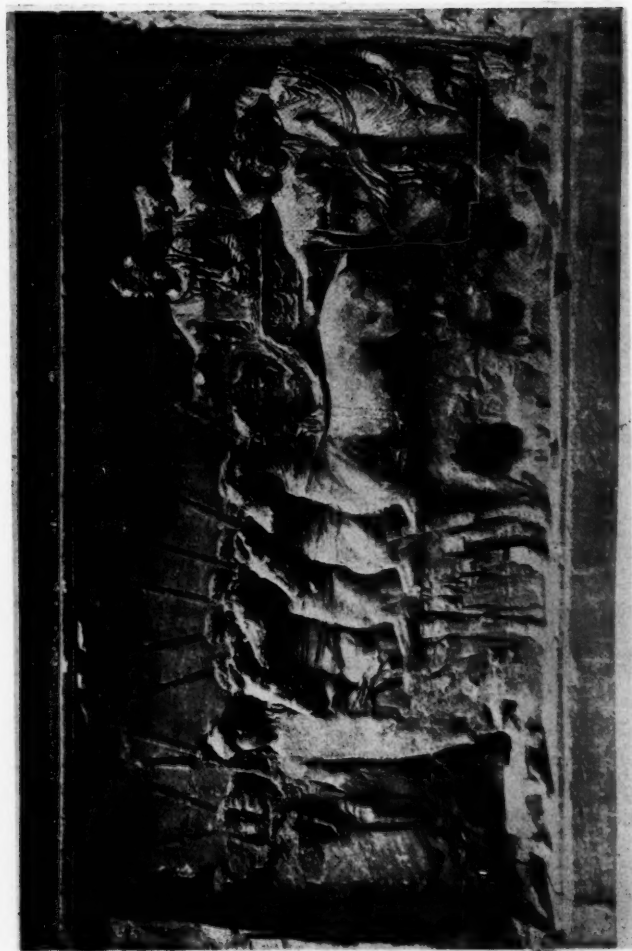


FIG. 1. — ARCH OF TITUS, ROME





in the left hand.<sup>9</sup> (d) He believes the dress of the figure on the left edge of the gem to be wrong. It is, however, a *paludamentum* in late Roman style.<sup>10</sup>

New light has been thrown on the problems of forgery and interpretation by a gem from the Evans Collection, recently acquired by the Metropolitan Museum of Art (fig. 4).<sup>11</sup> Gisela Richter is very cautious in interpreting the figures surrounding the Emperor. They are here reduced to four. The Victory behind the Emperor and the two figures guiding the horses are repeated on all four cameos. The Amor hovering above the horses and together with Victory holding the golden crown over the head of the triumphator appears also on the Hawkins cameo, according to the descriptions. Amor, the son of Venus Victrix, is also associated with Victoria on coins of the fourth century (figs. 5-6),<sup>12</sup> helping Victoria to hold a shield. The Evans gem lacks the two outermost figures, and the fasces, which the three others have; also the *tabula ansata* and the banner (called *labarum* in the publications) of the Biehler cameo (fig. 2). All four cameos resemble each other sufficiently to make a common source likely. But they do not agree enough to make this source the drawing by Bellori. I am of the opinion that the cameos were worked in the fourth century directly from the Arch of Titus, when the relief was in better condition than it is now. Far from being interpolations, the attributes in the hands (scroll and branches) can be used to reconstruct the parts now missing in the Flavian relief. The Evans cameo in New York has been examined by experts like Gisela Richter and Karl Lehmann. I agree with them that there is not the smallest reason for suspecting that this cameo is of eighteenth-century origin. This may help to redeem the other three cameos, and it would be desirable to find these stones in Austria, England, and the United States for renewed investigation. Perhaps we may even give the Amor of the Evans and Hawkins cameos to the Flavian Arch, for above the right hand of the Emperor there is a large square prop attached to the background (fig. 1), which might have been used for the body of the hovering figure, while two smaller supports near the hand might have been used for one leg of Amor and for a branch in the hand of Titus. We may also restore the side straps of the reins in the hands of the flanking figures, as indicated on the cameos, while the main reins are attached to the car.

These figures which lead the horses of the triumphator were identified by Purgold in 1868 as Honos and Virtus, military Honor and Valor.<sup>13</sup> There is no doubt that he was right and that this explanation has to be given also to similar figures in many other monuments of Roman art. Many coins with the inscription *Virtus Augusti* show that the martial spirit of the Emperor was personified in the guise of

<sup>9</sup> Petersen, *Ara Pacis Augustae*, figs. 1, 10, 13, 21, 28; pl. v, figs. 28, 39, 40; pl. vi, figs. 16, 26, 27, 33.

<sup>10</sup> Cf. Lillian Wilson, *The Clothing of the Romans*, pp. 100 ff.

<sup>11</sup> Sir Arthur Evans, *Greek and Greco-Roman Gems*, 1938 (privately printed), p. 29, no. 148; Gisela M. A. Richter, *Ancient Gems from the Evans and Beatty Collections*. The Metropolitan Museum of Art, 1942, p. 54. Cf. my review in *AJA*, xlviii, 1944, p. 112 f.

<sup>12</sup> Fig. 5 from a golden coin of Constantine I the Great (306-337 A.D.) in the collection of Edward Gans, New York, N 1120, (Cohen, vii, p. 617), here published with his kind permission. Fig. 6, golden medallion of Valentinianus I (364-375 A.D.) from Gnecci, *I Medaglioni Romani* i, pl. 14, fig. 7; cf. p. 35.

<sup>13</sup> Purgold, *Archaeologische Bemerkungen zu Claudian und Sidonius*, 1868, pp. 30 f. Accepted by Wissowa in Roscher, *Lexikon der Mythologie* vi, s.v. *Virtus*, pp. 344 ff.



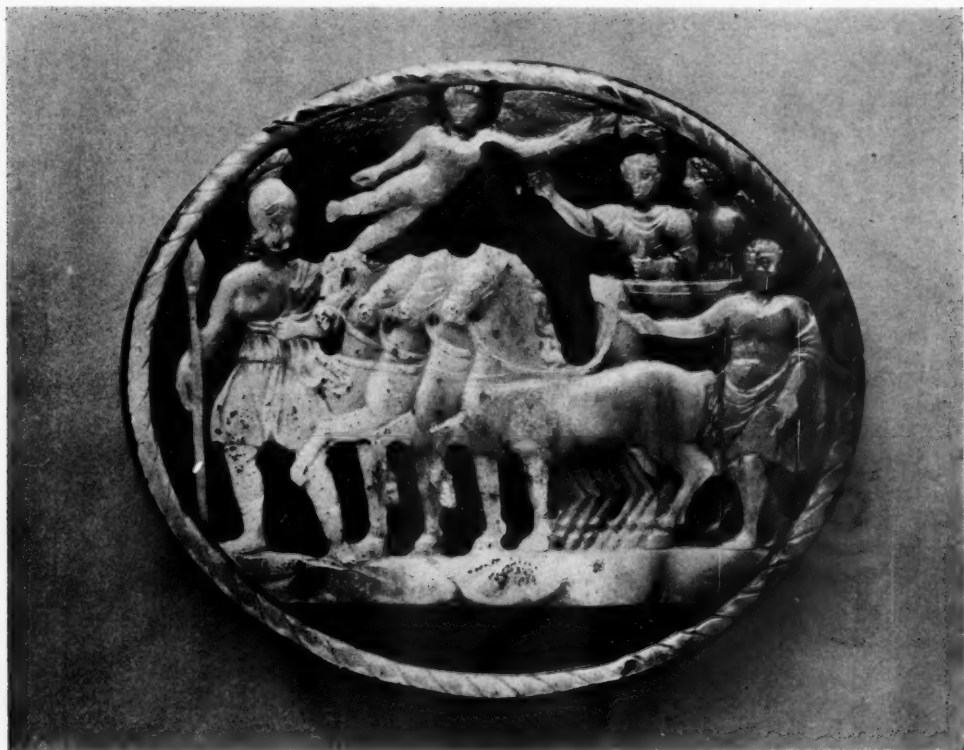


FIG. 4.—CAMEO IN THE METROPOLITAN MUSEUM, NEW YORK, FORMERLY EVANS COLLECTION



FIG. 5.—VICTORIA AND AMOR. GOLDEN COIN OF CONSTANTINE I, THE GREAT, COLLECTION EDWARD GANS, NEW YORK



FIG. 6.—VICTORIA AND AMOR. GOLDEN MEDALLION OF VALENTINIANUS I, PARIS





FIG. 7.—VIRTUS AVGVSTI. COIN OF DOMITIAN.  
BRITISH MUSEUM



FIG. 8.—VIRTUS. COIN OF ANTONINUS PIUS.  
BRITISH MUSEUM



FIG. 9.—ALTAR OF VIRTUS, FOUND IN COLOGNE,  
MUSEUM OF DARMSTADT



FIG. 10.—HONOS AND VIRTUS. COIN OF VES-  
PASIAN, BRITISH MUSEUM



an Amazon in military dress, with a short tunic leaving her right breast free, a helmet on her head, high boots on her feet, in one hand a spear, and in the other hand a dagger, with a belt, *parazonium* (figs. 7-8).<sup>14</sup> In the same guise she appears on altars in Africa, Gallia, and Germania, inscribed Deae Virtuti (fig. 9),<sup>15</sup> and on sarcophagi, on which prominent Romans are represented as hunting lions.<sup>16</sup> On coins of Commodus, the Emperor is shown fighting a lion or panther, and the inscription *Virtus Aug.* indicates that this personification expresses the manly spirit of the hunter.<sup>17</sup>

On coins of Galba, Vitellius, Vespasian, Antoninus Pius and Marcus Aurelius, *Virtus* stands opposite *Honos*, with the inscriptions *Honos* and *Virtus* (fig. 10).<sup>18</sup> *Honos* appears with the *pallium* just as he does on the Arch of Titus and on the cameos. He holds the cornucopia in his left hand. It is not surprising that these figures have been identified as *Genius Populi Romani*, for there is no doubt that the *Genius*, just as *Honos*, often appears with the same drapery and the same cornucopia.<sup>19</sup> *Honos*, as well as



FIG. 11.—HONOS. COIN OF ANTONINUS PIUS, BRITISH MUSEUM

<sup>14</sup> Cf. on the coins of *Virtus*: Gneecchi, "Le Personificazioni allegoriche sulle monete imperiali" in *Riv. Italiana di Numismatica* 18, 1905, pp. 349 f., 354-359, 387 ff., pl. xiv; cf. *id.*, *Medaglioni Romani* i, p. 54, no. 30, pl. 27, 7, aureus of Gallienus with *Virtus* and *Victoria*. List of the types in H. Mattingly, *A catalogue of Coins of the Roman Empire in the British Museum* i, p. 422; ii, p. 452; iii, p. 597; iv, p. 896. Fig. 7, coin of Domitian (81-96 A.D.) is from Mattingly, *op. cit.* ii, pl. 77, fig. 8; cf. p. 390; fig. 8, coin of Antoninus Pius (138-161 A.D.), *ibid.* iv, pl. 46, fig. 17; cf. p. 318, no. 1917. Cf. coin of Domitian, Mattingly-Sydenham, *The Roman Imperial Coinage* ii, p. 206, pl. vii, fig. 106; of Marcus Aurelius, *ibid.* iii, p. 176, pl. vii, fig. 136.

<sup>15</sup> Fig. 9 is from an altar, found in Cologne, now in the Museum of Darmstadt. *Germania Romana*, Bilderatlas, herausg. v.d. Römisch-Germanischen Kommission des Deutschen arch. Inst., sec. ed., iv, pl. xvi, 3. Cf. Koepp, pp. 23 f. and 40. *CIL*. 13, no. 8513 = Dessau, no. 3800. Cf. also *CIL*. 8, no. 9028.

<sup>16</sup> Sarcophagi with lion hunt of the third century: Rodenwaldt, in *JDI*. 51, 1936, pp. 82 ff., pls. 2-4; Margarete Gütschow, "Das Museum der Praetextat-Katakomben," in *Mem. Pont. Acc. di Archeologia* iv, no. ii, 1938, p. 33, fig. 3; pp. 66 ff.; 73, fig. 14, pls. vi-vii. Sarcophagus of the time of Constantine the Great: L'Orange and von Gerkan, *Der Bildschmuck des Konstantinsbogens*, p. 111, n. 1, and p. 222, fig. 58.

<sup>17</sup> Mattingly, *op. cit.* iv, p. CLVI and CLIX, pl. 95, fig. 8.

<sup>18</sup> Wissowa, in Roscher, *Lexikon der Mythologie* i, 2, 2708 f.; Gneecchi, *op. cit.*, in *Riv. It.*, p. 352 and p. 370; Mattingly, *op. cit.* i, p. 357, nos. 255-257, pl. 58, fig. 10, Galba posthumous issue (ca. 71 A.D.) cf. p. 375 (Vitellius); ii, p. 114, nos. 530-531, pl. 20, fig. 2, and p. 185, no. 760, pl. 32, fig. 8. Fig. 10 is from Mattingly ii, pl. 20, fig. 2, Vespasian (69-79 A.D.). These coins thus are of about the same period as the Arch of Titus.

<sup>19</sup> Ernst Rink, *Die bildlichen Darstellungen des römischen Genius*, 1933.



the Genius of the Emperor, is later represented as wearing a toga on coins (fig. 11).<sup>20</sup> In both cases they represent the Emperor himself, or the personification of his spirit or of his honor. But the difference is that Honos holds a scepter or a branch in his right hand, while the Genius, whether of the people or of the Emperor, always has a sacrificial bowl. Often he is seen holding it over an altar, and this is the only action in which he is ever represented. The figure on the cameos, however, has a branch, and thus must be Honos. It is also not to be wondered at that the female figure has been named Roma, for again there is a similar type used for Roma on Republican coins (fig. 12b)<sup>21</sup> and on coins of the Empire (fig. 13).<sup>22</sup> She is in military dress like Virtus. The difference is that Roma puts her foot not on a helmet or a boar's head, as Virtus often does, but on a globe, and in her hand she frequently holds the small figure of a Victory (sometimes on a globe). In the later period, moreover, she is usually seated<sup>23</sup> and she is always fully clad, with both breasts covered, as on the Gemma Augustea in Vienna and on coins of Constantine the Great and even later (fig. 14).<sup>24</sup>

Roma and Genius Populi Romani belong together as Honos and Virtus belong together. The heads of the latter appear united on coins of the two moneyers of the Gens Fufia and of the Gens Mucia, Quintus Fufius Kalenis and Mucius Cordus, who struck their joint coinage in 72 B.C. (fig. 12a).<sup>25</sup> The two deities, moreover, had four sanctuaries in common.<sup>26</sup> The oldest was outside the Porta Capena. Q. Fabius Verrucosus built a temple for Honos in 233 B.C., to which M. Claudius Marcellus, after the conquest of Syracuse in 205, added one for Virtus, in such a way that the older temple of Honos could only be reached through the temple of Virtus, thus symbolizing the belief that honor can only be attained by military valor. Both temples were restored by Vespasian. A second sanctuary was dedicated outside the Porta Collina by Cornelius Scipio Africanus after the victory of Numantia in 133 B.C. Marius dedicated a third temple after the defeat of the Teutons and Cimbri in 103 B.C. It was a beautiful peripteros temple, built by the architect Q. Mucius on the slope of a hill, probably the Capitoline hill (Vitruvius 3, 2; 5, 7. praef. 17).

<sup>20</sup> Fig. 11, coin of Antoninus Pius (138-161 A.D.) from Mattingly, *op. cit.* iv, p. 318, pl. 46, fig. 15. Cf. for Honos, Mattingly list of types, iv, p. 880 and for the types of the Genius, Rink, *op. cit.*, pl. 1. Cf. Honos on coin of Marcus Aurelius, Mattingly-Sydenham, *op. cit.* iii, p. 178, pl. vii, fig. 139.

<sup>21</sup> Fig. 12 from a coin in my possession. Cf. Cohen, *Médailles Cons.* pl. xviii and xxviii. Babelon, *Monnaies de la République Romaine* i, pp. 213 f., pp. 467 ff., pp. 511 f.; Grueber, *Coins of the Roman Republic in the British Museum* i, pp. 415 f.; ii, p. 72; iii, pl. xliii, fig. 5.

<sup>22</sup> Franz Richter, in Roscher iv, s.v. *Roma*, pp. 154 f.; Quilling, *op. cit.*, pp. 208 ff.; Mattingly, *op. cit.*, list of types: i, p. 419; ii, p. 448; iii, p. 591; iv, p. 890 f. Fig. 13 from Mattingly ii, pl. 38, fig. 3. Cf. p. 198, coin of Vespasian in Fairbairn Collection.

<sup>23</sup> Franz Richter, *op. cit.*, pp. 152 f.; Quilling, *op. cit.*, p. 199 f.; Grueber-Poole, *Roman Medallions in the British Museum*, p. 97, no. 1, pl. lxiv, fig. 4, Valentinian I (364-375 A.D.); Toynbee, *Roman Medallions* (in the press) pl. xxxv, figs. 6-9. Mattingly, list of types, cf. note 22 above. Cf. also the seated Roma on the relief representing the apotheosis of Antoninus and Faustina from the base of the columna Antonini, now in the Giardino della Pigna of the Vatican (Amelung, *Skulpt. des Vat. Mus.* i, pp. 888 ff. no. 223, pl. 116).

<sup>24</sup> Grueber-Poole, *op. cit.*, p. 86, no. 6, pl. lviii, fig. 3, Constantine the Great (306-337 A.D.) and p. 95, no. 2, pl. lxiv, fig. 2, Constantius Gallus (351-354 A.D.) = our fig. 14. Toynbee, *op. cit.*, pl. xxxvii, fig. 11.

<sup>25</sup> See note 21.

<sup>26</sup> Wissowa, in Roscher i, 2, s.v. *Honos*, pp. 2707 f. and vi, s.v. *Virtus*, p. 338 f.; Kiepert and Hülsen, *Forma Urbis Romae antiquae*, pl. 1.





FIG. 12.—A. HONOS AND VIRTUS. B. ITALIA AND ROMA. COIN OF THE  
GENS FUFIA AND GENS MUCIA. COLLECTION OF THE AUTHOR



FIG. 13.—ROMA. COIN OF VESPASIAN. FAIRBAIRN COLLEC-  
TION



FIG. 14.—ROMA. COIN OF CONSTANTIUS GALLUS. BRITISH  
MUSEUM



Pompey erected a fourth sanctuary on the Campus Martius. When we consider that the general or Emperor was not allowed to enter the city before the Senate had granted the triumph and that the triumphal procession began in the Campus Martius, went through the Circus Maximus, around the Palatine, and over the Via Sacra up to the Capitol,<sup>27</sup> we can well understand that the two military deities could lead the victorious Emperor from the entrance gate into the city as well as from the Campus Martius to the Capitoline Hill. I therefore believe that on the relief inside the Arch of Constantine (fig. 15)<sup>28</sup> the goddess who leads Trajan directly after his



FIG. 15.—TRAJANIC RELIEF FROM THE ARCH OF CONSTANTINE, ROME

victory, which is symbolized by Victoria crowning him and by the army in the background, is Virtus Augusti, who personifies his manly vigor and courage, and who has won him victory and triumph.

Thus both on the Arch of Titus and the cameos, the martial spirit which has inspired the Emperor, and the honor won on the battlefield, are the proper personifications to lead the horses in the triumphal procession. Roma and the Genius Populi

<sup>27</sup> Cagnat, *DS.* ix, s.v. *triumphus*, pp. 488 ff.

<sup>28</sup> Fig. 15 from Phot. Deutsches Arch. Inst. L'Orange and von Gerkan, *op. cit.*, pp. 187 ff., pls. 49-50, "Roma oder Virtus." The figure that accompanies the Emperor during the battle on the Pons Mulvius (pl. 10a) is, of course, also Virtus, not Roma, as is stated on p. 66 and p. 70, n. 1.



Romani are not suited for such an office. They are represented on the keystones of the Arch of Titus where they are thought of as receiving the Emperor.<sup>29</sup>

There is no doubt that statues of the two military gods must have stood in their sanctuaries and it is probably these statues that inspired the representations on the coins, arches, and cameos. It may well be that some of the heads labelled Athena, Minerva, or Roma in our museums, and some of the torsos labelled Amazon or Diana, may well represent Virtus, and others labelled Genius Populi Romani may represent Honos. The subject requires further investigation.

COLUMBIA UNIVERSITY

MARGARETE BIEBER

<sup>29</sup> Strong, *Scultura Romana*, pl. 20. Roma and the Genius Populi Romani are represented also on the keystones of the Arch of Constantine: L'Orange and von Gerkan, *op. cit.*, p. 148 f., pls. 35 and 36 e. The figure of Roma appears also on a keystone of the Arch of Janus, *ibid.*, fig. 22.



## THE ROOF OF THE MYCENAEAN MEGARON

SINCE the excavation of the great palace at Tiryns in 1884 the form of the roof covering the Mycenaean megaron has been the subject of persistent inquiry and discussion. With each succeeding discovery of comparable architectural remains the problem has been raised afresh, and the scanty physical evidence has often been reappraised. In the main, two opposing views have been advanced, one postulating a flat roof, the other a pitched, or gabled roof, and each has attracted vigorous champions who have adduced numerous and varied arguments in support of their contentions. Recently the whole question has been subjected anew to a thorough, painstaking examination by E. Baldwin Smith<sup>1</sup> who, marshalling an impressive array of comparative material from Mediterranean lands, the Near and remoter East, from the Balkans and from Central Europe, believes he has established conclusively that the megaron had a pitched roof. In a supplementary note<sup>2</sup> expressing his full agreement with that view, which he long ago sponsored<sup>3</sup> and continues still to hold, Dinsmoor calls attention to some important new evidence which he thinks has now definitely settled the problem in favor of the gabled form of roof. The purpose of the present paper is first to scrutinize more closely the validity of the new evidence cited, and next to consider briefly Baldwin Smith's reconstruction of the megaron.

We may perhaps best begin by quoting part of the concluding paragraph of Dinsmoor's note, one categorical sentence of which I have had italicized:

"It is precisely at this point that recent evidence which he < Baldwin Smith > does not bring into the discussion, throws brilliant light upon the problem. For not only are we to infer, from analogy and from the ground plans themselves, that the roofs were sloping and covered with clay from time immemorial, *but we now also have tangible proof that the transition from sloping roofs of unbaked clay to sloping roofs tiled with baked clay was made within the Helladic Age.* Fragments of baked roof tiles have been discovered in the Early Helladic III round building at Tiryns, in Middle Helladic strata at Dorion (Malthi) in Messenia, and perhaps also in a second-hand use in a Middle Helladic grave at Asine in Argolis; they have also been discovered in Late Helladic III debris on the north slope of the Athenian Acropolis and at Berbati in Argolis as well as in Late Helladic III graves at Berbati and Thebes. Such tiles demand sloping roofs for their support and presuppose a long anterior development with more primitive construction. It seems to me that the question is no longer debatable."

Let us examine first the tiles of Early Helladic date. According to Kurt Müller<sup>4</sup> a good many fragments were recovered in and about the great circular building at Tiryns in association with numerous thin pieces of schist of irregular sizes and shapes. No complete tile was found, but the average thickness is about 0.01 m. and the other dimensions are conjectured by Müller, on the analogy of similar plaques brought to light in the contemporary Early Helladic settlement at Asine, to have been about 0.18 m. by 0.21 m. In the subsequent publication on Asine Persson states<sup>5</sup> that broken pieces of such tiles were of fairly common occurrence throughout the settlement, but only three examples are well enough preserved to allow overall

<sup>1</sup> *AJA.* xlv, 1942, pp. 99-118.

<sup>2</sup> *AJA.* xlv, 1942, pp. 370-372.

<sup>3</sup> Anderson, Spiers, Dinsmoor: *History of Greek Architecture*, p. 18.

<sup>4</sup> *Tiryns* iii, pp. 85-86.

<sup>5</sup> *Asine*, p. 233, fig.



measurement.<sup>6</sup> All are relatively small, the largest barely exceeding in length and width the size of a sheet of standard typewriting paper. Professor Persson, who believes that the Mycenaean megaron had a roof of gabled form, says about these Early Helladic pieces: "The tiles are square, smooth slabs without any groove or hole for fastening, wherefore it must be assumed that the roofs of the EH houses were flat." Müller had previously reached the same conclusion at Tiryns, pointing out that the plaques, which are provided with no means of fastening, are neither large enough nor strong enough for a sloping roof. Certainly no one who has actually seen and examined them can believe for a moment that they were laid in overlapping position. But the evidence from Tiryns, as Müller carefully indicates, does not make it certain that the tiles actually came from the roof of the round building at all; they were found lying in debris beneath the level of the floor, and the associated thin slabs of schist are of a kind frequently used in Helladic pavements. It is thus just as likely that the plaques were intended to cover some part of the floor inside the structure as that they were made to serve as tiles for a roof-terrace. Comparable floors of small terracotta tiles, or of Malta-plaques, are frequently seen in many parts of Greece today.

For the sake of completeness we may mention a few tiles, apparently of the same general kind, which are reported to have been found in Early Helladic deposits at Malthi (Dorion) in Messenia.<sup>7</sup> Some of them are said to bear mat-impressions on one side, but unfortunately no measurements, no description and no photographs are offered. This material is therefore of little value as evidence.

Our scrutiny of the tiles of Early Helladic date thus shows that they may have been made for the pavement of floors rather than for use on roofs, but that if they were employed for roofing, they must have been laid horizontally and not on a slope. In any event, it is perfectly clear that they can in no wise be fairly said to offer "tangible proof that the transition from sloping roofs of unbaked clay to sloping roofs tiled with baked clay was made within the (Early) Helladic Age."

Turning next to the Middle Helladic Period we find that Dinsmoor refers us to new discoveries from two sites, namely Malthi (Dorion) in Messenia and Asine in Argolis.

The evidence from Asine may be dismissed in a few words: Dinsmoor himself thinks it rather unconvincing, recording merely that what is perhaps a roof-tile occurs in a second-hand use in a Middle Helladic grave. A glance at the description given by the excavator, O. Frödin,<sup>8</sup> reveals that it is actually a brick and not a tile. The brick is of the surface-fired variety, 0.18 m. thick; it was placed at the foot-end of the cist tomb and traces of a similar brick were observed at the opposite end. Frödin recognized the piece as a brick, but noting that the outer skin to a depth of ca. 0.02 m. was slightly harder than the core, suggested as a barely possible alternative that two thin tiles had been placed on edge while the space between was filled with unfired clay. Such "surface-fired" bricks are not rare; the hardening of the outer skin was probably caused by exposure to air or sun while the piece was drying.

<sup>6</sup> No. 1: 0.18 m. wide, 0.215 m. long, 0.015 m. thick; no. 2: 0.235 m. wide, 0.25 m. long, 0.02 m. thick; no. 3: 0.225 m. wide, 0.28 m. long, 0.017 m. thick.

<sup>7</sup> Valmin, *Swedish Messenia Expedition*, pp. 43, 44.

<sup>8</sup> *Asine*, p. 117, Grave 20.



At Malthi Valmin<sup>9</sup> excavated a small settlement, identified as Dorion, which was occupied in all three periods of the Bronze Age. The architectural remains, consisting mainly of foundation-walls in various conditions of preservation and often superposed one above another, were fairly easily differentiated; but well-marked floors with pure and undisturbed deposits rarely came to light. Nevertheless, three main layers corresponding to the periods mentioned could generally be distinguished. We have already spoken of the few "tiles with mat-impressions" recovered from the Early Helladic stratum. The Middle and Late Helladic layers, according to Valmin, yielded masses of fragments of roof-tiles. His detailed account of the Middle Helladic houses includes a catalogue of the objects found in each; but remains from the superposed Late Helladic layer are likewise often listed on the same pages for these areas, and it is not always easy to separate the two groups accurately. In his chapter on the Middle Helladic layer, Valmin records the finding of tiles in no fewer than 45 different lots. In 21 instances the exact or approximate numbers of fragments are recorded, varying from 17 to "about 200"; but often the entry says "some," "a few," "many" or "large quantity," and such pieces are reported from most of the houses in the settlement. The counted fragments, if my addition is correct, total 1405, and those otherwise and more vaguely indicated (24 entries) must at least equal that number, thus giving an aggregate at this one site of nearly 3000 fragments of tiles mainly belonging to the Middle Helladic Period. This is certainly a startling new fact, if true, and one which not only constitutes the most important result of the excavations at Malthi, but which sets that site apart as unique and unparalleled among contemporary establishments on the mainland of Greece. For no other Middle Helladic settlement has produced even a single fragment of a tile. Nothing of the sort came to light at Asine (see above) nor at Tiryns either on the citadel or in the lower town. The admirably conducted explorations at Eutresis produced not one fragment and the same statement holds good for Mycenae as well. At Eleusis and Korakou, too, tiles are wholly lacking, as at all other contemporary settlements known to me. The failure to find them can be attributed at none of the sites mentioned to faulty supervision and observation on the part of the excavators: there simply were no tiles.

How then are we to explain the abundance of such material from Malthi in Messenia? Not the least remarkable feature of the publication is the fact that, although thousands of pieces are said to have been found, not one tile is anywhere described or illustrated, either in a photograph or in a drawing, and no measurements whatever are given. Furthermore, no discussion of the form of the roof appears anywhere in the volume. A clue suggesting a solution of the problem may perhaps be gained by a closer examination of the exact wording of Valmin's itemized entries. Frequently the entries state: "large quantities of roof-tiles," "some broken tiles," "fragments of tiles and coarse pithoi." But in at least six instances an alternative is offered and we read "pithoi or tile fragments, 5 pieces;"<sup>10</sup> "curving roof tiles or fragments of large pithoi, about 100 fragments;"<sup>11</sup> "fragments of tiles or large pithoi;"<sup>12</sup> "some remains of tiles or large pithoi;"<sup>13</sup> "fragments of coarse pithoi (or possibly tiles);"<sup>14</sup>

<sup>9</sup> Valmin, *op. cit.*

<sup>12</sup> *Ibid.*, p. 129.

<sup>10</sup> *Sw. Mes. Exped.*, p. 62.

<sup>13</sup> *Ibid.*, p. 155.

<sup>11</sup> *Ibid.*, p. 128.

<sup>14</sup> *Ibid.*, p. 155.



"fragments of large pithoi or tiles."<sup>15</sup> In other instances we note "large pieces of broken pithoi . . . which were perhaps used as roof-tiles;"<sup>16</sup> "about 50 fragments of roof tiles and of coarse pithoi (no base was found), which had probably been used for roofing purposes;"<sup>17</sup> "pieces of broken pithoi which were probably used as roofing."<sup>18</sup> A reading of these passages makes it clear that Valmin was himself often uncertain whether the fragments actually came from tiles or from large storage jars; and when he says: "very little was found of what could be called tiles or other roof coverings,"<sup>19</sup> we must conclude that the basis of his classification is interpretative; and we are inevitably led to wonder if in fact any real tiles at all were found, and if the material is not rather made up wholly of the shattered remains of huge pithoi. In any event it is obvious that the evidence cited from Malthi, so far as it is yet available, cannot properly be said to give us "tangible proof" that tiles demanding a gabled form of roof occur in the settlement.

Continuing our scrutiny we come now to the Late Helladic period. Here we must consider the tiles found in Late Helladic III debris on the north side of the Athenian Acropolis and in the settlement at Berbati in Argolis, as well as some pieces recovered in two graves of the same date at Berbati and in contemporary tombs at Thebes.

The latter were first discovered in 1914 by Keramopoulos and have been known since his publication appeared in 1919.<sup>20</sup> Three fragments were found in Grave 1, an unspecified number in Graves 2 and 4 of the cemetery near the Electran Gate,<sup>21</sup> 2 fragments in Tomb 3 of the Ismenion cemetery,<sup>22</sup> and one piece in the dromos of Tomb 24 in the Kolonaki cemetery.<sup>23</sup> No vestiges of such tiles were brought to light in the Palace itself, although Keramopoulos reports the finding there of some square terracotta plaques which were used for the pavement of the floor of the building.<sup>24</sup> Six fragments from the Electran cemetery are illustrated by Keramopoulos.<sup>25</sup> At first glance these pieces with their raised edges certainly look as if they come from roof-tiles of the Corinthian shape with which the excavator compares them. Unfortunately all the fragments are small and no measurements of a complete example are possible. Furthermore, the exact shapes cannot be certainly determined, and we consequently do not know whether or not the long sides were parallel. In two instances the raised edges are seen to diminish in height, being rounded off toward the ends of the tiles, and it accordingly seems probable that we have represented here the same shape we shall find at Berbati. The edges vary from 0.042 m. to 0.063 m. in height, and the flat bottoms range from 0.014 m. to 0.02 m. in thickness. The bottoms are in no instance preserved to a width of more than a few cm. The obvious resemblance to Corinthian tiles is in my opinion misleading: there is, in fact, no conclusive evidence whatever to show that these pieces actually come from roof-tiles: they may with at least equal plausibility be ascribed to shallow drain-tiles of a form which we shall see was not uncommon in Mycenaean and Minoan installations. The place of finding—in secondary use in a tomb—certainly gives no direct and specific support to the interpretation of these fragments as roof-tiles. On the other hand, the

<sup>15</sup> *Sw. Mes. Exped.*, p. 156.

<sup>16</sup> *Ibid.*, p. 121.

<sup>17</sup> *Ibid.*, p. 149.

<sup>18</sup> *Ibid.*, p. 166.

<sup>19</sup> *Ibid.*, p. 138.

<sup>20</sup> *Δελτ.* iii, 1917, pp. 75-77.

<sup>21</sup> *Ibid.*, pp. 25, 28.

<sup>22</sup> *Ibid.*, p. 93.

<sup>23</sup> *Ibid.*, p. 184.

<sup>24</sup> *Εφ.* 1909, p. 70; *Δελτ.* iii, 1917, p. 77, note 1.

<sup>25</sup> *Ibid.*, p. 76, fig. 58.



complete absence of such remains in the ruins of the House of Kadmos itself is surely not without significance.

The two fragments found near the bottom of the underground passage on the north side of the Acropolis at Athens have been carefully described and illustrated by Broneer.<sup>26</sup> Though the raised edges recall that feature of Corinthian roof-tiles, the pieces are relatively small and much battered, and the exact shape of a complete example is not determinable: it is impossible to say, for instance, whether the long sides were parallel or not. Broneer, with admirable caution, remarks: "Since only two pieces were found, it must remain uncertain whether these were used as roof-tiles or served some other purpose." One such alternative purpose is easy to suggest: the fragments may be from shallow drain-tiles; and the place of discovery, inside a Mycenaean water-system, can surely not be cited as an argument against such an interpretation.

We have next to look at the similar remains from Berbati in Argolis, which are mentioned in a preliminary report by Å. Åkerström.<sup>27</sup> Fifteen fragments of tiles are stated to have been found in the Mycenaean layers of the settlement; but two simple graves of the same period yielded material in a better state of preservation. In one tomb three tiles had been set on edge along one side of the shaft, and in the second two tiles stood in a like position. Altogether, four examples are sufficiently well preserved to allow overall measurements: the lengths apparently vary from 0.50 m. to 0.60 m., and the greatest width is 0.40 m. In all instances there is a raised edge, ca. 0.05 m. high, along each side, but in most cases it diminishes in height and disappears toward the ends. So far as can be determined, each tile is of tapering shape, broader at one end than at the other; and Åkerström points out that when they were laid, the narrow end of one was obviously fitted into the broad end of the next, "wie bei Wasserrinnen"—as in the laying of water channels. This comparison, it seems to me, is more than apt; and one may well ask: are not these pieces themselves actually sections of a water-channel? Åkerström, although granting the possibility of such an interpretation, rejects it as unlikely because of the very scant height of the raised edges, which would make the channel extremely shallow. He therefore prefers the view that the tiles were made for use on a sloping roof. The fact that he admits an alternative possibility, however unlikely he may regard it, at once precludes the acceptance of this evidence as "tangible proof" of the preferred theory, and Åkerström himself is too cautious to make so strong a claim.

Some good reasons for doubting that these are actually roof-tiles present themselves readily. In the first place, just as it was long ago remarked that μίαν χεῖλιδὼν ἕνα οὐ ποιεῖ, so we may fairly observe now that 15 fragments of tiles found scattered over a considerable area do not make the roof of a house, let alone the roofing of an entire town. The extreme scarcity of such remains hitherto brought to light is indeed a very powerful argument against Åkerström's interpretation. Any one who has excavated the ruins of a building, of classical times or later, that was once covered by a roof of tiles, will remember the hundreds and thousands of shattered

<sup>26</sup> *Hesperia* viii, 1939, p. 408, figs. 90, 91.

<sup>27</sup> *AA.* 1938, pp. 554-557, fig. 13. I have not seen the publication cited by Dinsmoor, *VI Kongr. Archäologie Berlin* 1939, pp. 297-298.



pieces invariably encountered: basket after basket is filled with such fragments, and even the most inattentive excavator could not fail to pay some attention to material so abundant and so conspicuous, however fragile and broken it might be. Most of the important Mycenaean sites of the Greek mainland have been excavated or re-examined during the past 30 years and more, by competent and conscientious archaeologists trained to observe; and apart from that at Berbati, no other settlement of the period in question has produced a single fragment of a roof-tile.<sup>28</sup> Berbati thus stands as the only Mycenaean town-site at which the discovery of tiles (and there are only 15 fragments) has yet even been claimed. The other material cited by Dinsmoor includes 2 fragments recovered in a Mycenaean water system and a few pieces found in a second-hand use in graves. If roofing of this kind was really known in Mycenaean times, it is almost incredible that it should not have been employed for the famous megara at Mycenae and Tiryns. The latter was excavated nominally by Schliemann, but the work was actually conducted under the direct supervision of Dörpfeld, a trained architect who was interested in the problem of the roof and who was looking for specific evidence to solve it. He records, not once but several times, that "not a single tile of baked clay was found anywhere in the palace; it is therefore impossible that the roofs can have been covered with clay-tiles."<sup>29</sup> The megaron at Mycenae was excavated by Tsountas, as keen and intelligent an observer as our best field-archaeologists today. In his description Tsountas states positively, "No tiles were found at Mycenae."<sup>30</sup> We thus have direct and reliable evidence that tiles were non-existent at these two key sites. Is it likely that they were employed for roofing at smaller and less important establishments before they were introduced in the capitals themselves? This is, of course, a rhetorical question, and the answer is no.

But apart from general considerations there are other reasons for doubting that these pieces from Berbati are roof-tiles. The tapering form, with one end considerably broader than the other, as may be seen in Åkerström's illustration, looks somewhat too exaggerated to be suitable for roof-tiles. They would demand an excessive amount of overlapping and would be awkward to lay and to cover. But what is still more difficult to reconcile with their use on a roof is the fact that they appear to vary considerably in length. Surely if they were roof-tiles they would have been made in molds of approximately uniform dimensions, so that fitting and adjustment would offer a minimum of trouble. But if they are sections of a water-channel, or drain tiles, the differences in length would cause no difficulty in their setting, on the contrary might often be of distinct advantage where exigencies of space required special arrangements. The fact that the lateral raised edges often diminish before reaching the ends of the tiles would in no way interfere with the efficiency of a water-conduit, since the sections overlapped sufficiently to cover such discrepancies.

The shallowness of the channel is no bar to the identification of these pieces as drain-tiles. Similar conduits of relatively little depth, both in stone and in terra-

<sup>28</sup> I leave out Malthi in Messenia, where tiles are reported to have been found, since the publication offers no more convincing account of them than of the like remains said to have been recovered from the Middle Helladic layer. *Swedish Messenia Expedition*, pp. 174, 175, 176, 178, 180, 181, 182, 184.

<sup>29</sup> Schliemann, *Tiryns*, p. 273.

<sup>30</sup> Πρακτικά 1886, p. 73; Μυκῆναι καὶ Μυκηναῖος Πολιτισμός, Athens, 1893, p. 38.



cotta, were found by Evans in the Palace of Minos at Knossos. One such channel having a width of 0.15 m. was only 0.06 m. deep,<sup>31</sup> and a comparable runnel of terracotta came to light in the "Theatral Area" to the northwest of the building.<sup>32</sup> The well-known stone channels descending a stairway in a series of hyperbolic curves are comparatively broad and shallow. Along with many other architectural details Minoan types of drains and water-channels were undoubtedly imported and adapted by the builders of the Mycenaean settlements on the mainland in the Third Late Helladic Period. Several underground conduits of this kind were noted by Dörpfeld at Tiryns, one being only 0.08 m. deep, though much narrower than the pieces from Berbati,<sup>33</sup> another having a depth of some 0.16 m.<sup>34</sup> Similar drains underlay the Palace at Mycenae and were installed elsewhere on the acropolis.<sup>35</sup> A relatively broad shallow runnel, with four overlapping sections still preserved *in situ*, was brought to light at Zygouries.<sup>36</sup> In all these examples the sections are of tapering shape and in some instances the overlap exceeded 0.10 m. With the exception of the channel at Zygouries, all those mentioned were subterranean installations, evidently meant to care for a considerable volume of water. Still shallower runnels, like the pieces from Berbati, may well have been set above ground inside a few of the better houses to carry off a less copious flow to the larger underground drains, or merely out into the open. Or they may have been used in a shallow duct to carry oil out of an olive press. A channel through a wall would require only two or three sections, and if the installations were by no means numerous the survival of so scanty remains of such runnels is understandable. On the other hand, if roofs had been covered by such tiles, we should certainly have fragments by the thousands instead of a bare 15 from Berbati alone.

In any event, it must have become obvious from the foregoing discussion, that the new evidence adduced by Dinsmoor falls sadly short of constituting "tangible proof," or indeed any kind of proof, of the theory he holds regarding the development of the sloping roof in the Helladic age. In every instance an alternative explanation is possible, often proffered by the excavator himself, and, to say the least, fully as plausible as the other interpretation. When subjected to a test, the brilliant new light thrown upon the problem has failed or has suffered a severe dimout, if not indeed a complete blackout. We are consequently and perhaps reluctantly forced to fall back once more upon "inference, from analogy and from the ground plans themselves," in our attempt to determine the form of the roof of the Mycenaean megaron, and the whole question has again become just as debatable as ever.

It is here that we must turn to the article, already mentioned, by E. Baldwin Smith. He has given us a fully documented study showing a wide acquaintance with early domestic architecture and containing much information of interest. In an admirably methodical approach he establishes a working basis for his further discussion by formulating a precise definition of what constitutes a megaron—and it might be remarked that a satisfactory definition of the term has long been a much needed desideratum. Whether the one now proposed will prove to be acceptable or not re-

<sup>31</sup> *Palace of Minos* ii, p. 462.

<sup>32</sup> *Ibid.*, p. 234, fig. 113.

<sup>33</sup> *Ibid.*, iii, p. 248, fig. 172.

<sup>34</sup> *B.S.A.* xxv, p. 187.

<sup>35</sup> Schliemann, *Tiryns*, p. 246.

<sup>36</sup> *Zygouries*, p. 35, fig. 31.



mains to be seen, but at least it provides definite ground on which to stand. According to Smith's postulates (and we quote in full):

"A megaron was an isolated rectangular or apsidal structure used as a dwelling, at first for men and much later for divinities, which consisted of a main hall, entered usually, but perhaps not necessarily at one end, and commonly, in its developed stage, through an open porch with antae; it may or may not have been large enough to require interior supports, which, when present, were set in several different ways, in order to carry the roof; it originally had an interior hearth, frequently circular, associated with it, and it was covered by a sloping roof."

This is certainly a broad and inclusive definition, going far beyond the much narrower limits formerly set. Indeed, it would seem to take in almost any freestanding one-roomed house, not circular in plan, regardless of its date, geographical situation, building materials, and other details. In accordance with these postulates it makes little difference whether the room is rectangular or apsidal, whether it is oblong or nearly square in shape, whether it has the entrance in a long side or at one end, whether it has a central hearth, a hearth in some other position, or no hearth at all; and the presence or absence of a portico, or of interior supports, is of relative unimportance. It is thus that Smith is able to find so many examples from all parts of the ancient world. But one cannot help wondering if this concept of the megaron based on a superficial similarity of ground-plan is not a purely theoretical abstraction by which many wholly unrelated structures, scattered widely within vast chronological and geographical limits, and belonging to heterogeneous cultures, have been arbitrarily classified into a single hypothetical group.

Furthermore, if we accept the definition literally, it has one curious, unforeseen, not to say startling, consequence: by the terms, as postulated, almost the only important early edifices that must be definitely excluded from the category of megara are the very two with which that Homeric name gained entry into architectural terminology, namely the great halls of the palaces at Mycenae and Tiryns.<sup>37</sup> For neither is in any proper sense of the word an isolated building: each is an integral and an integrated part of the complex in which it stands. In neither instance have we to deal with a foreign intrusion thrust into the midst of a previously existing conglomeration of small rooms; each was built at one and the same time with many of the chambers and corridors associated with it. Thus at Tiryns some of the walls of the connected apartments toward the west are structurally bonded with the west wall of the great megaron.<sup>38</sup> For all these surrounding rooms and corridors, because of their differences in size, shape, and probably also in height, Smith assumes flat roofs, since any other type of covering is hardly conceivable, and it is only for the megaron itself that he ventures to postulate a gabled form of roofing.

A penetrating and dispassionate examination of the problem by K. Müller<sup>39</sup> has not received the attention it deserves, nor is it cited by Smith. Müller points out that a great many of the structural and decorative features recognizable in the megaron, as well as in the rest of the palace at Tiryns, are clearly derived

<sup>37</sup> The term megaron seems to have been used first in 1885 by Dörpfeld in his description of the palace at Tiryns (Schliemann, *Tiryns*, pp. 208 ff.). Later the name was applied to other halls of similar plan, including those of Troy II (Dörpfeld, *Troja und Ilion*, p. 85).

<sup>38</sup> K. Müller, *Tiryns* iii, p. 152.

<sup>39</sup> *Tiryns* iii, p. 152.



from Minoan palatial architecture. Thus the floors with their smooth stucco pavements, perhaps some of the shaped column-bases, and certainly the wooden columns they supported, appear to be modeled after prototypes known at Knossos. The triple entrances from portico to vestibule in the large megaron, and the lateral installation of a throne both in the large and in the small megaron, as well as the stuccoed circular hearths no less obviously betray the same origin. Likewise adapted from Cretan forerunners is the construction of the walls with their running dado of orthostate blocks; the alabaster slabs in the portico, which bear decoration in carved relief and inlay, executed in the Minoan manner, were doubtless actually brought from the island. Other elements adapted from the same source are the antae, and especially the plastered wall-faces with their painted frescoes patently reflecting a Knossian inspiration. Indeed, the Minoan reminiscences throughout the entire edifice are so all-pervasive <sup>40</sup> as to make the conclusion inevitable that the palace was not only designed by, but was erected under the direct supervision of an architect thoroughly schooled in Knossian traditions of craftsmanship. Is it credible that when a complex palace rising under such conditions was approaching completion the king, who sponsored the undertaking, should suddenly dismiss his Minoan-trained architect, summon a northerner to replace him and order that one room in the conglomeration be finished with a gabled roof of northern type? The chance of such a happening in a single instance, as in the great megaron, is sufficiently remote; but to postulate another occurrence of the same nature, as in the small megaron (of somewhat earlier date), is highly improbable. And when a third example of the same kind of change has to be postulated, for the megaron at Mycenae, it seems to me we are venturing far beyond the bounds of probability into a field of pure imagination. Surely the reasonable and logical conclusion must be that the megaron, like the other constituent parts of the complex, had a flat roof of Minoan type.

Müller calls attention <sup>41</sup> to certain structural peculiarities observed both in the small and the large megaron at Tiryns, but apparently not noted by Smith, which seem definitely to favor the case for a flat roof. The transverse partition walls are appreciably thicker than the lateral walls of the building and were therefore presumably designed to carry a greater weight. With a pitched roof the proportions should be reversed, since the main weight and thrust would have to be sustained by the side walls. No similar variation in the thickness of the walls appears to exist in the megaron at Mycenae, where, however, most of the inner end and all the southern flank of the great hall have been completely destroyed.

It is not my purpose in this paper to deal with Smith's arguments in detail. But I would like, in my turn, to offer a preliminary postulate which it seems to me essential to keep firmly in mind in any further discussion of the problem here involved. *Mycenae buildings must be studied, interpreted and restored primarily in the light of their own milieu; and no one constituent element of a complex may fairly be torn out of its proper context and treated as if it were an isolated and independent unity.* It is in many ways highly interesting and instructive to extend our view to a wider horizon, noting pertinent similarities and differences; but surely comparisons with structures so remote in time and culture as a house of the stone age at Jericho, or so dis-

<sup>40</sup> *Tiryns* iii, pp. 189-193.

<sup>41</sup> *Ibid.*, p. 190.



tant geographically and spiritually as the dwellings built of posts and daub in central Germany are wholly incompetent, irrelevant and immaterial when we are endeavoring to determine the form of the roof over the great hall of a complex Mycenaean palace in southern Greece constructed otherwise in thoroughgoing adherence to Minoan architectural traditions. No one would maintain that the details of the Cathedral of Reims could be safely restored from apparent analogies observed through a study of Coptic churches in Egypt; nor that structural peculiarities of the Maison Carrée at Nîmes, let us say, might shed valuable light on questions concerning the rustic Stave-kirks of Norway, or *vice versa*. Yet these comparisons are certainly no more remote and far-fetched than some of those adduced in his discussion of the megaron by Smith, who ranges freely through immense stretches of the Stone and Bronze Ages in Europe, Asia and Africa. The roof of the Mycenaean megaron offers a problem of much more restricted extent; the solution, in my opinion, will only be possible through a study of the pertinent evidence found in its own environment and age.

UNIVERSITY OF CINCINNATI

CARL W. BLEGEN



## RHOSICA VASA

"*Rhosica vasa mandavi*," Cicero wrote Atticus from Laodicea in 50 B.C.: "*Sed heus tu! quid cogitas? in felicis lancibus et splendidissimis canistris holusculis nos soles pascere; quid te in vasis fictilibus appositurum putem?*"<sup>1</sup>

For what kind of pottery had Atticus asked? Considering the disdain with which well-to-do Romans regarded ceramic tableware evident in Cicero's reaction to the request,<sup>2</sup> it must have been a novelty, something as yet new to Italy, but obtainable in north Syria where Rhosus was situated on the southern side of the Bay of Issus at the foot of the Amanus Mountains.<sup>3</sup> We now know, from the recent excavations at Antioch<sup>4</sup> and Tarsus, the types of pottery available during the early Roman period in the regions around the Bay, so we should be able to suggest an identification for the *Rhosica vasa*.

We can narrow down the possibilities by eliminating the various western wares which began to make their way to eastern shores toward the end of the first century B.C.; for geographical as well as chronological reasons, Atticus could not have had these in mind.

The common glazed pottery at Tarsus and Antioch (as for the eastern Mediterranean world) from about the middle of the second century B.C. on was a red glazed fabric, the so-called "Pergamene" ware which Frederick Waagé has divided into an early and a late phase, the former called "Hellenistic Pergamene," the latter "Roman Pergamene."<sup>5</sup> Both were plain and severe in style and unlikely to attract attention. "Hellenistic Pergamene," identified by a limited repertory of characteristic thick-walled plates and bowls, was no novelty by Cicero's time. Available evidence indicates that "Roman Pergamene" was not on the market until the end of the first century B.C.;<sup>6</sup> aesthetically it offered no more than the predecessor; technically it was inferior.

<sup>1</sup> Cicero, *Ad Att.* vi, 1, 13. The passage was brought to my attention by Professor T. R. S. Broughton of Bryn Mawr College. This article has its origin in studies made while preparing the chapter on pottery for the forthcoming volume on the Hellenistic and Roman finds from the excavations at Gözlu Kule, Tarsus, directed by Professor Hetty Goldman of the Institute for Advanced Study. It is a pleasure to acknowledge my indebtedness to both. I also wish to thank Miss Gisela M. A. Richter for giving me information about the provenance of objects in the Metropolitan Museum of Art.

<sup>2</sup> George H. Chase, *Museum of Fine Arts, Boston: Catalogue of Arretine Pottery*, pp. 2-4. Gisela M. A. Richter, *The Craft of Athenian Pottery*, p. 102.

<sup>3</sup> Kiepert, *Atlas Antiquus*, pl. iv, F 1. *RE*, s.v. *Rosus*. The modern name is Arsus; *Les guides bleus: Syrie, Palestine, Iraq, Transjordanie*, Paris, 1932, pp. 187-188.

<sup>4</sup> F. O. Waagé, *Antioch-on-the-Orontes* i, pp. 67 ff., a preliminary account; the final report on the pottery will appear in *Antioch-on-the-Orontes* iv. Through the courtesy of the director of the Antioch excavations, Professor Alexander Campbell, I was able to see the pottery at Antioch. In America, Mr. Waagé very kindly showed me the collection brought back to Princeton University; discussions with him were both interesting and helpful. The Roman pottery from Antioch and Tarsus differs only in details.

<sup>5</sup> Waagé in Rostovtzeff, *The Social and Economic History of the Hellenistic World*, pp. 1639 ff. The evidence from Tarsus supports this division.

<sup>6</sup> The earliest evidence is provided by a cistern at Samaria in which a few pieces of "Roman Pergamene" may be seen in a fill of Hellenistic and "Hellenistic Pergamene" pottery containing coins ranging from 200 to 40 B.C. (Reisner, Fisher, and Lyon, *Harvard Excavations at Samaria*, pp. 304-306).



Moulded bowls, covered with red glaze, which were the successors to the "Megarian" bowls of the Hellenistic period, may be eliminated; not only did Italy make their equivalent, but their history in the east goes back to the time when "Hellenistic Pergamene" was introduced.<sup>7</sup>

There is, however, one class of fine pottery which stands out from the rest and qualifies beyond doubt as a novel ware of east Mediterranean manufacture: the colorful lead glazed pottery.<sup>8</sup> This, we suggest, was the Rhodian ware Atticus desired. It differed from its contemporary wares and from the long tradition of black and red glazed pottery of the classical world in that the glaze was not an alkali glaze, but a vitrified coat, composed chiefly of lead, obtainable in bright, new colors.<sup>9</sup> True, both the relief ornament and the common shapes of the lead glazed

<sup>7</sup> Waagé, *Antioch-on-the-Orontes* i, p. 68, pl. XIV, k-m. A complete example in Yale University is well illustrated by Baur, *AJA.* xlv, 1941, p. 242, fig. 13. While such bowls were manufactured as early as the second century B.C., the sparse decoration of the Yale bowl—on analogy with the series found at Tarsus—is more characteristic of pieces of the first and second centuries A.D. An earlier style of decoration is shown in *CVA.*, United States of America 2, Providence 1, pl. 31, 4 (not Arretine as there identified).

For Italian bowls, cf. Pryce, *JRS.* xxxii, 1942, p. 14.

<sup>8</sup> For general bibliography:

Courby, *Vases grecs à reliefs*, pp. 513 ff.

Dragendorff, *Bonner Jahrbücher* xcvi, 1895, pp. 114 ff.

Jamot, article "Figlinum," p. 1132, in *DS.*

Mazard, "De la connaissance par les anciens des glaçures plombifères," *Musée Archéologique* ii, 1879, pp. 373 ff.

Merlin, *MonPiot* xxxii, 1932, pp. 51 ff.

Minns, *Scythians and Greeks in South Russia*, pp. 354-357.

Pottier, article "Vasa," p. 662, in *DS.*

Rayet and Collignon, *Histoire de la céramique grecque*, pp. 375 ff.

Richter, "Hellenistic and Roman Glazed Ware," *BMA.* xi, 1916, pp. 64 ff.

Rostovtzeff, "The Parthian Shot," *AJA.* xlvii, 1943, pp. 174 ff.

Von Stern, *Odesskoe Obshchestvo istorii i drevnostei*, *Zapiski* xxii, 1900, pp. 22 ff.; xxvii, 1907, pp. 88 ff.

(I am indebted to Mrs. Edward Bill of the Institute for Advanced Study for translating these articles.)

Walters, *Catalogue of the Roman Pottery in the British Museum*, pp. x ff.

Zahn, "Hellenistische Reliefsgefäße aus Südrussland," *JdI.* xxiii, 1908, pp. 74 ff., no. 37. (Abbreviated Zahn I).

Zahn, "Glasierte Thongefäße im Antiquarium," *Amtliche Berichte aus den königlichen Kunstsammlungen* xxxv, 1914, cols. 277 ff. (Abbreviated Zahn II).

Zahn, "Glasierter Thonbecher im Berliner Antiquarium," *Berliner Winkelmannsprogramm* 81, 1923. (Abbreviated Zahn III).

<sup>9</sup> A high lead content in a sample of the glaze from Tarsus was determined from the index of refraction by Frederick Matson of the University of Michigan; this report, as yet unpublished, is presented by Florence E. Day, *Mesopotamian Pottery: Parthian, Sassanian and Early Islamic*, Ann Arbor, 1940, p. 70, note 180 (thesis on deposit in the Library of the University of Michigan). An analysis of glaze from Smyrna is given by Reinach, *BCH.* vii, 1883, p. 78. An even earlier analysis of what seems to have been Roman vitreous glaze found in England was made in 1847 by M. Faraday, who pronounced it a lead glaze (published by Diamond in *Archaeologia* xxxii, 1867, p. 452).

Lead glaze was evidently known to the Babylonians and Assyrians (Layard, *Discoveries in the Ruins of Nineveh and Babylon*, p. 166. Cameron, *The Biblical Archaeologist* vii, 1944, p. 34, a reference kindly brought to my attention by Miss Swindler). But the many centuries which separate their colorful tiles and pottery from the Roman products also dissociate them from the problem under consideration, regardless of whether the reappearance of lead glaze in Roman times represents the revival of a dormant knowledge of the process or (more likely) a rediscovery of the technique.



pottery reveal the inspiration of the luxury products of the silver- and goldsmiths;<sup>10</sup> Atticus would probably not have been interested in this latest attempt of the potter to imitate metalware cheaply merely because the lustrous and impermeable surface made it an unprecedented success as an imitation. What would have intrigued him was the beauty of the dark green (sometimes yellow green), mustard or light yellow, and brown glaze, the glassiness of its texture and appearance, and the additional polychromy obtained in the occasional use of underglaze paint—red, white, black, green—beneath the yellow glaze.<sup>11</sup>

From the manufacturer's point of view the ware was out of the ordinary, for much care and labor was lavished upon it. The buff to red clay was of excellent quality, carefully prepared. The relief ornament was delicate, the underglaze painting often painstaking. The fluid nature of the glaze under heat meant that precautions had to be taken to keep the surplus from dripping on the vases in the lower part of the kiln; saucers to catch the drip and also to serve as stilts were found at Tarsus. Vases, therefore, could not be quickly stacked in a kiln, but had to be arranged with care and without regard for economy of space. Two firings were also considered necessary, once for the biscuit (on which underglaze paint, if any, was applied), and again for the glaze, a departure from tradition substantiated by the discovery of unfinished pieces at Tarsus.<sup>12</sup>

The elaborate and therefore costly production undoubtedly accounted for the short life of a discovery of such potentialities. The two firings and the loosely packed kiln made the process expensive. Even in the days of cheap slave labor, lead poisoning may have been an economic consideration, if not the humanitarian one it was in nineteenth-century Britain.<sup>13</sup> In the face of competition by the glassmakers, whose industry was rapidly growing in Syria at about the same time and whose products were cheap and easily made, potters probably could not continue manufacture of lead glaze on a profitable basis.

The lead glazed pottery has long been thought to be of east Mediterranean origin. Ever since Barker<sup>14</sup> and Langlois<sup>15</sup> probed the mound of Gözlü Kule for antiquities in the middle of the nineteenth century and unearthed the pieces of lead glaze which later found their way to the Louvre and other collections, it has been supposed that Tarsus was one place of manufacture. The recent excavations have provided substantial proof of this in the form of a mould fragment, several unfinished pieces, and the stilts on which the vases were fired in the kiln.<sup>16</sup> Possible wasters at Çandarlı,

<sup>10</sup> The ring-handled skyphos, the most common shape in this fabric, krater, askos, jug, and modiolus were all made in metal. Several of these are represented in the Boscoreale Treasure (*MonPiot*, v, 1897, pls. III ff.).

<sup>11</sup> Underglaze painting is fairly common at Tarsus. For an example cf. Goldman, *AJA*, xxxix, 1935, p. 531 and fig. 9.

<sup>12</sup> See note 16 below. Two firings for the alkali green glazed ware from Dura are stated by Mr. Toll: N. Toll, *The Excavations at Dura-Europos*. Final Report IV, Part 3, Fascicle 1, *The Green Glazed Pottery*, p. 2. A single firing was the general rule for ancient wares; evidence for one firing of Athenian pottery is assembled by Miss Richter, *The Craft of Athenian Pottery*, pp. 37 ff.

<sup>13</sup> Lead poisoning as an occupational hazard in the ceramic industry was the subject of government investigation at the end of the last century. Sir Thomas Oliver, *Dangerous Trades*, London, 1902, pp. 346 ff.

<sup>14</sup> W. B. Barker, *Lares and Penates*, London, 1853.

<sup>15</sup> V. Langlois, *Voyages dans la Cilicie*, Paris, 1861.

<sup>16</sup> Goldman, *AJA*, xlvii, 1943, p. 34.



near Pergamon, led Loeschcke to name that site as a center.<sup>17</sup> A sherd found at Notion seems, from the written description, to be an unfinished piece which would indicate a factory there.<sup>18</sup> While such evidence of manufacture is concentrated in Asia Minor, perhaps because of more extensive investigation of Roman sites, many of the fine museum pieces are reported to be from Syria or South Russia. The following list of places or regions in the east Mediterranean from which lead glazed pottery and also lamps and terracottas have been reported to come or at which they have been purchased or have actually been found reveals as focal areas South Russia and the strip running along the Anatolian coast to North Syria.<sup>19</sup> Finds outside this area are comparatively sporadic.

## Olbia:

Oenochoe, Metropolitan Museum 17.190.2068:

Minns, *op. cit.*, pp. 355-356, fig. 262.

Richter, *BMMA*, xi, 1916, p. 66.

Von Stern, *op. cit.*, xxvii, 1907, pp. 88 ff.

*Zahn* III, p. 12.

Modiolus, from same first century A.D. tomb as the Metropolitan Museum jug:

*Drevnosti* xv, part II, 1894, pp. 14 ff., pls. II-IV.

Minns, *op. cit.*, pp. 354-355.

Von Stern, *op. cit.*, xxii, 1900, pp. 24 ff., pl. I, 1.

*Zahn* III, p. 12, fig. 4.

Skyphos, Berlin Antiquarium 5011:

Minns, *op. cit.*, p. 357, note 2.

*Zahn* I, p. 74, no. 37.

*Zahn* II, col. 291.

Skyphos, Odessa Museum:

Minns, *op. cit.*, p. 357.

Von Stern, *op. cit.*, xxii, 1900, pp. 50 ff., fig. 1.

Skyphos: Odessa Museum:

Minns, *op. cit.*, pp. 356-357.

Von Stern, *op. cit.*, xxii, 1900, pp. 45 ff., pl. II, 1.

Skyphos:

Minns, *op. cit.*, p. 357, fig. 263.

Skyphos:

*AA.* 1911, pp. 229-230, fig. 37.

*Zahn* II, col. 300.

Skyphos:

Von Stern, *op. cit.*, xxii, 1900, pp. 53-54, fig. 2.

*Zahn* II, col. 300.

## Kerch:

Krater, Berlin Antiquarium 4916:

*Ibid.*, pp. 36 ff., pl. 1, 2.

Minns, *op. cit.*, p. 356.

Von Stern, *op. cit.*, xxii, 1900, pp. 36 ff., pl. I, 2.

*Zahn* I, p. 76.

*Zahn* II, cols. 288-290, fig. 154.

Two skyphoi:

Von Stern, *op. cit.*, xxii, 1900, p. 52, pl. II, 2, pp. 52, 53, pl. II, 3.

## South Russia:

Krater, Berlin Antiquarium 30139:

*Zahn* II, col. 288, fig. 153.

Cup, Berlin Antiquarium 30140:

*Ibid.*, col. 292, fig. 155.

Probably also two oenochoi:

Von Stern, *op. cit.*, xxii, 1900, pp. 55-56.

## Istanbul:

Skyphos, Berlin Antiquarium 30152:

*Zahn* II, col. 282, fig. 147.

Skyphos, Berlin Antiquarium, no. 30247:

*Ibid.*, col. 287, fig. 162.

Figurine, Berlin Antiquarium 8826:

*Ibid.*, col. 287, fig. 151.

## Troad:

Figurine, Cöln, Niessen Collection 3296:

Niessen, *Beschreibung römischer Altertümer gesammelt von Carl Anton Niessen*, no. 3296.

Skyphos, Louvre CA 1486:

Courby, *op. cit.*, pl. xviii.

Merlin, *l.c.*, p. 56, fig. 4.

Pottier, *RA.* 1903, I, pp. 12 ff.

<sup>17</sup> Loeschcke, *AM.* xxxvii, 1912, pp. 396-397.

<sup>18</sup> Demangel and Laumonier, *BCH.* xlix, 1925, pp. 342-343.

<sup>19</sup> The list is not exhaustive, but is representative. A great deal of unpublished information is undoubtedly available for a complete census. Places of purchase have been included, since local markets are likely to be supplied by local discoveries. Objection may be raised to the inclusion of undocumented provenances, but the combined evidence — not that of individual pieces — is suggestive. The Italian and European finds, since clearly representing a westward expansion of the technique, have been omitted purposely.



## Çandarlı:

Fragments: Loescheke, *AM.* xxxvii, 1912, pp. 396-397.

## Pergamon:

Fragment: Zahn I, p. 77.

## Myrina:

Fragments of pottery, lamps, terracottas:

Pottier and Reinach, *Terres cuites et autres antiquités trouvées dans la nécropole de Myrina*, p. 323 f.

Pottier, Reinach, Veyries, *La Nécropole de Myrina*, pp. 137, 238.

## Cyme:

Fragments of pottery and figurines in Paris and Istanbul:

Pottier and Reinach, *op. cit.*, p. 287.

Pottier, Reinach, Veyries, *op. cit.*, p. 137, note 4; p. 173, note, no. 9; p. 238.

Reinach, *BCH.* vii, 1883, p. 78.

Reinach, *Esquisses archéologiques*, Paris, 1882, p. 221.

Winter, *Typen der figürlichen Terrakotten*, p. LXVIII.

## Smyrna:

Fragments of pottery and figurines (many in Louvre):

Courby, *op. cit.*, p. 523.

Merlin, *l.c.*, figs. 1, 5.

Pagenstecher, *Calenische Reliefkeramik*, p. 171.

Pottier and Reinach, *op. cit.*, pp. 323 ff.

Pottier, Reinach, Veyries, *op. cit.*, p. 137, note 4; p. 238.

Rayet and Collignon, *op. cit.*, p. 377.

Reinach, *BCH.* vii, 1883, p. 78.

Reinach, *Esquisses archéologiques*, Paris, 1882, p. 221.

## Skyphos, Louvre CA 607:

Merlin, *l.c.*, pp. 53-55, fig. 1, right.

## Skyphos, Berlin Antiquarium:

Furtwängler, *Beschreibung der Vasensammlung im Antiquarium*, 1885, p. 799, no. 2886.

## Fragment in Arndt Collection, Munich:

Zahn III, p. 19, note 47 (end).

## Ephesus:

Lamp, British Museum: Walters, *op. cit.*, K53.

## Notion:

Fragment (see comment, p. 48):

Demangel and Laumonier, *BCH.* xlix, 1925, pp. 342-343.

## Priene:

Fragment:

Wiegand and Schrader, *Priene*, p. 410, no. 57.

## Patara:

Skyphos in Tübingen:

Watzinger, *Griechische Vasen in Tübingen*, G31.

## Cibyra:

Rayet and Collignon, *op. cit.*, p. 377, note 1.

## Ankara (region):

Jug, Berlin Antiquarium 30024:

Zahn II, col. 283, fig. 149.

## Gordion:

Fragment, probably of this fabric:

Körte, *Gordion, Jahrbuch Ergänzungsheft v*, p. 195, no. 85.

## Tarsus (see notes 11 and 16):

Fragments:

Barker, *op. cit.*, pp. 182, 183.

CVA. France 15, Sèvres, p. 24, 18.

Heuzey, *GBA.* 1876, II, p. 385 f.

Mazard, *l.c.*, pp. 390, 406-408, 413.

Merlin, *l.c.*, pp. 51 ff.

Rayet and Collignon, *op. cit.*, p. 377.

## Paphos:

Kantharos, British Museum:

Walters, *op. cit.*, K6.

## Cyprus:

Two skyphoi, Metropolitan Museum:

Myres, *Handbook of the Cesnola Collection of Antiquities from Cyprus*, New York, 1914, p. 120, nos. 988-989.

Richter, *l.c.*, p. 65, figs. 4-5.

Skyphos, formerly in collection of Mr. Franks, London:

Mazard, *l.c.*, p. 436.

## Aleppo and vicinity:

Skyphos, Metropolitan Museum 15.163.2:

Richter, *l.c.*, p. 65-66, fig. 6.

Rostovtzeff, *The Social and Economic History of the Hellenistic World*, pl. cvii, 2.

Skyphos, Metropolitan Museum 15.163.1:

Richter, *l.c.*, pp. 64-65, fig. 1.

Rhyton, Walters Art Gallery 48-127.

Lamp, Metropolitan Museum 19.57.2.

## Aintab, near Aleppo:

Pyxis, Louvre CA 2926:

Merlin, *l.c.*, p. 51.

## Maara, near Aleppo:

Krater, Collection of Mrs. W. H. Moore, New York:

Eisen, *Glass*, pl. 188.

Krater, Metropolitan Museum 17. 120, 251:

*BMAA.* xi, 1918, pp. 58-59.



- Amphoriskos, Metropolitan Museum 17. 190.  
2069:  
Richter, *l.c.*, fig. 9.
- Antioch:  
Fragments in collection brought back to Princeton University (reported to be rare).
- Hama:  
Inkwell, Metropolitan Museum:  
Richter, *l.c.*, pp. 64, 66, fig. 3.  
Jug, Metropolitan Museum 42.11.46:  
Alexander, *BMMA*. iii, 1945, pp. 133ff.
- Salemiyeh:  
Dish, Metropolitan Museum 24.46.
- Homs and vicinity:  
Skyphos, Metropolitan Museum 29.100.77:  
Rostovtzeff, *op. cit.*, pl. cviii, 2.  
Skyphos, collection of Mrs. W. H. Moore, New York:  
*Ibid.*, pl. cvii, 1.  
Rostovtzeff, *AJA*. XLVII, 1943, pp. 174 ff.  
Alexander, *loc. cit.*
- Dura:  
Fragment:  
Cumont, *Fouilles de Dura Europos*, Paris, 1926, pp. 457, 473, pl. cxix, 11.
- Damascus:  
Skyphos, Berlin Antiquarium 4969:  
*Zahn*, II, col. 282, fig. 146.
- Syria:  
Two skyphoi, Walters Art Gallery, 48-122, 48-125:  
Hill, *GBA*. xxxv, 1944, p. 66, fig. 1 (48-125).  
Skyphos, Metropolitan Museum 42.11.44:  
Alexander, *loc. cit.*
- Petra:  
Fragments:  
Horsfield, *QDAP*. ix, 1941, pp. 199-200, nos. 449-457.
- Cairo:  
Pig, British Museum:  
Walters, *op. cit.*, K14.
- Fayum:  
Skyphos, Berlin:  
Wiegand and Schrader, *Priene*, p. 419, note †††.
- Egypt:  
Skyphos, Metropolitan Museum 26.7.1018.
- Benghazi:  
Askos, British Museum:  
Walters, *op. cit.*, K15.
- Kalymnos:  
Jug, British Museum:  
*Ibid.*, K5.
- Thera:  
Askos, British Museum:  
*Ibid.*, K4.
- Kythnos:  
Fragment, Bonn:  
*Zahn* II, col. 293.
- Tanagra (?):  
Skyphos, British Museum:  
Walters, *op. cit.*, K2.
- Salonica:  
Skyphos, National Museum, Athens:  
Nicole, *Catalogue de vases peints du Musée National d'Athènes*, supplement, no. 1344.
- Pella, Macedonia:  
Modiolus, Berlin Antiquarium 30141:  
*Zahn* II, cols. 294 ff., fig. 156.  
*Zahn* III.

We have, as yet, no means of tracing the direction of expansion of the lead glaze technique in the eastern Mediterranean. Tarsus so far provides the earliest excavation date (see below) and it is quite possible that the glaze spread from the Cilician-North Syrian region northward along the Anatolian coast to South Russia as well as across the sea westward to Italy and thence to central Europe. Flourishing commerce, well attested by the lamp industry, made the transfer to Italy early in the first century A.D. a very natural and easy process. The close ceramic relationships of the eastern end of the Mediterranean world facilitated the diffusion of the technique through that area. Probably guarded at first as a trade secret, knowledge of the manufacturing process may well have been held for several years in one or two places such as Rhodus and the industry may not have begun to spread and thrive until the end of the first century B.C. When we see it in its most flourishing phase in the first century A.D. it has already acquired local variations which are discernible even in the limited material at hand. The Tarsus and North Syrian groups show a preference for plant motives and stylized ornaments. The technical superiority



of Tarsus examples was noted long ago by Mazard<sup>20</sup> (such superiority might indicate the nearness of the original source). South Russian potters appear to have indulged in caricature and the grotesque more frequently than those of other regions; they employed a peculiar form of underglaze painting in which faces of figures or other objects to be emphasized were covered with white.<sup>21</sup> The frequent use of barbotine rather than a moulded relief decoration also seems to be characteristic of the South Russian and probably the north Aegean area.

Dates have usually been assigned to the lead glazed pottery by its evident affiliation with the art of the Augustan period. The wide geographical distribution and indications of local styles in the first century A.D. suggest an origin at least as early as the beginning of the century. The similarity to Arretine ware, to which it is related, not directly, but through the metalware both imitated, takes the style of the pottery back to about 30–25 B.C., the date of the first Arretine.<sup>22</sup> Our knowledge of early Roman silverware is unfortunately considerably less than the detailed information which has been garnered from studies of Arretine pottery, so comparisons with metal are not fruitful. The glaze was used to coat terracotta figurines and lamps as well as pottery, but neither offers assistance here; the lamps are Italian types of the first century A.D. and the figurines cannot be closely dated by style alone. Professor Rostovtzeff has pointed out that the Parthian on the cup belonging to Mrs. Moore in New York suggests that the cup was made in the first century B.C. when the Parthian invasions were a very real and terrifying menace.<sup>23</sup> (Cicero expresses concern about the Parthians in the same letter in which he mentions the *Rhosica vasa*).

At Tarsus, most of the lead glazed pottery and almost all of the evidence of local manufacture come from a fill which was laid down about the time of Tiberius or Claudius, but which consists largely of material of the Augustan period with some earlier objects included. Unfortunately, there is a break in the sequence of Tarsus deposits in the second half of the first century B.C., obscuring the transition from earlier styles to those of the imperial period, so we cannot tell precisely when the lead glaze was introduced. A few fragments were found in deposits antedating the middle of the century, but the numerous intrusive pits which cut into the habitation levels of Gözlü Kule make it inadvisable to give weight to such slight evidence.

We have, then, no compelling reasons to date the lead glaze much before the age of Augustus and also none to argue against so doing. If the technique were new around the middle of the century and the glaze obtainable in only one or two places, these facts would explain the lack of evidence at Tarsus and other sites. The reasons for identifying the *Rhosica vasa* with the lead glazed ware make the equation very probable, but they await more positive chronological confirmation.

FRANCES FOLLIN JONES

INSTITUTE FOR ADVANCED STUDY

<sup>20</sup> Mazard, *l.c.*, pp. 414, 417.

<sup>22</sup> Pryce, *JRS.* xxxii, 1942, pp. 14 ff.

<sup>21</sup> As, for example, *Zahn* II, cols. 288–290, fig. 154.

<sup>23</sup> Rostovtzeff, *AJA.* xlvii, 1943, p. 186.



## GRAECO-EGYPTIAN MASKS AND PORTRAITS IN THE ROYAL ONTARIO MUSEUM

### PLATES I-VI

THIS article deals with a group of Graeco-Egyptian portraits and plaster masks of the Roman period, which are in the Royal Ontario Museum, Toronto.<sup>1</sup> These objects were used in mummy decoration as coverings for the face or for the head and chest. The masks, sixteen in number, form a series extending from Claudian or Flavian times to the reign of Marcus Aurelius,<sup>2</sup> during which period their style progresses from one almost purely Egyptian to one purely Graeco-Roman. Their chief historical value lies in the light they throw on the relations between native and foreign cultures and populations during this time.

Masks of Graeco-Egyptian type first came into use in later Ptolemaic times<sup>3</sup> and are the work of native craftsmen for a clientele among the Greek and Hellenized Egyptian middle class in the inland towns.<sup>4</sup> The price of a mask was well beyond the means of a peasant or laborer.<sup>5</sup> The middle class, though mixed in race, were Greek by law and in language and education, and maintained themselves aloof from the native lower classes. They were also influenced strongly, however, by Egyptian forces, especially by Egyptian religion. Their use of Egyptian burial customs is evidence of this fact.

Plaster masks continued to be used in mummy decoration during the Roman period throughout the whole of Middle Egypt.<sup>6</sup> In the Fayûm, however, they were supplanted in the course of the first century A.D. by portraits painted on wooden panels which were inserted over the face of the mummy. These from the beginning were purely Graeco-Roman in style.

The type of mummy in use in Middle Egypt lay flat, as on a bed, the mask being fastened, sometimes by cords through holes in its base, over the head and chest. In

<sup>1</sup> I wish to thank Dr. Currelly and the Board of the Royal Ontario Museum for permission to publish these masks and portraits, and to express my gratitude to Mrs. Homer Thompson for her help and encouragement in the writing of this article.

<sup>2</sup> I have dated these masks for the most part by comparison with those in the Cairo Museum. For these, see C. C. Edgar, *Graeco-Egyptian Coffins, Masks, and Portraits* (*Catalogue général, Musée du Caire*), Cairo, 1905. (Edgar)

<sup>3</sup> For an account of the development of Graeco-Egyptian mummy decoration in the Fayûm before and during the period dealt with in this article, see Flinders Petrie, *Roman Portraits and Memphis* iv (British School of Archaeology in Egypt and Egyptian Research Account), 1911, introduction, page 3. (Petrie)

<sup>4</sup> For an account of the formation in Ptolemaic times of one Graeco-Egyptian middle class, see M. Rostovtzeff, *Social and Economic History of the Hellenistic World* ii, pp. 882 f. and 1154. For an account of its continuance in Roman times, see H. I. Bell, "Egypt under the Early Principate," *CAH*. x, pp. 297-300.

<sup>5</sup> In a second-century account of burial expenses the price of a mask is given as 64 drachmae, that of the whole funeral as 440 drachmae. During the same century typical laborers' wages vary from 12 to 40 drachmae per month. See Tenney Frank, *Economic Survey of Ancient Rome* ii (*Roman Egypt to the Reign of Diocletian*, by A. C. Johnson), pp. 307 f. and 324.

<sup>6</sup> The provenance of the Toronto masks is unknown. They are, however, of the same type as those in Edgar, which came from sites in Middle Egypt.

<sup>7</sup> For the earliest type, see Edgar, pls. ix-xvii. For the third century type, see pl. xxx, nos. 33210 and 33211.



the earlier masks the head lay level with the body. Later it was gradually raised, bending at the neck, until, in the third century, it was almost at right angles to the body.<sup>7</sup> In the Byzantine period head and chest masks were used which were derived in part from this type, in part from the type of mummy decoration in use in the Fayûm.<sup>8</sup>

*The Masks in the Royal Ontario Museum.*

The standard form of the complete mask is shown on pl. I, no. 4. Its general shape is the same as that of the earliest masks from Middle Egypt, except for the inclination of the head. It belongs to about the middle of the second century A.D. Another bust, without the head, is shown on pl. IV, no. 17.<sup>9</sup>

The chiton, the mantle about the shoulders, and the hands holding a wreath are typical. The wreath, which first appeared on the masks in late Hellenistic or early Roman times,<sup>10</sup> was still used in the Byzantine period.<sup>11</sup> It seems to have had a religious significance, and to have been Graeco-Roman rather than Egyptian in origin.<sup>12</sup> Rose wreaths were used in the ceremonies of the Graeco-Roman Isis cult,<sup>13</sup> with which cult many of the owners of the masks were probably connected.

On the back of no. 4 below the head is a Greek inscription,<sup>14</sup> and below that a band divided into three compartments. In the outer two (one of which is visible in the photograph) are painted eyes and jackals of Anubis, a god of the dead, and a helper of Isis in the Osiris story. Both were very ancient symbols in Egyptian funerary art.

<sup>8</sup> See Edgar, pls. XLVI and XLVII. The craftsman here seems to be imitating, in paint and plaster work on the wrappings of the mummy, the earlier type of mummy decoration in which the mask was made separately and fastened on.

<sup>9</sup> Both masks are built over a core of wood. No. 4 on pl. I has canvas under the wood, while no. 17, on pl. IV has canvas between the plaster and the wood. Both smell strongly of embalming perfumes. The head was made separately and joined to the bust. There is no indication how the mask was fastened to the mummy. Both masks are stained a dark brown. The mantle of no. 4 was originally white and the chiton and perhaps the mantle of no. 17 were crimson. The wreath in the hand of no. 17 is pink.

<sup>10</sup> See Petrie, introduction, p. 3. The earliest Graeco-Egyptian masks at Hawara do not have the wreath. Probably real wreaths were in use for some time before they began to be represented in plaster.

The wreaths are of two types, large ones worn about the head, and smaller ones held in the hand. A real wreath of small asters is possessed by the Royal Ontario Museum (no. G3537 in the Museum files). It is made over a core of raffia and has ties at each end for binding it about the head. A similar wreath is painted on a coffin from the Fayûm which is dated by C. C. Edgar in the latter part of the third century B.C. (Edgar, pl. v). Also see A. Hekler, *Greek and Roman Portraiture*, pl. 256, for a Hadrianic relief of Antinous wearing a rose wreath about his head and carrying a wreath of small star-shaped flowers in his hand.

<sup>11</sup> See Edgar, pl. XLVI, no. 33276; also see J. D. Cooney, *Late Egyptian and Coptic Art* (Brooklyn Institute of Arts and Sciences, The Brooklyn Museum), 1943, pl. 3.

<sup>12</sup> See Ludwig Deubner, "Die Bedeutung des Kranzes im klassischen Altertum," *Archiv für Religionswissenschaft* 30, 1933, p. 70. According to Deubner (pp. 94 to 96) the usual purpose of the funeral wreath was apotropaic.

<sup>13</sup> See A. Erman, *Handbook of Egyptian Religion*, 1907, pp. 250 f., for a picture and description of a wall painting from Pompeii showing an Isiac ceremony in which one priest carries a sistrum and a rose wreath. Also see Apuleius, *Metamorphoses* XI, where a priest of Isis carries these same two articles in a procession in Greece. It is by eating this rose wreath that the donkey in the story is changed back into a man. A group of women in the same procession wear garlands on their heads.

<sup>14</sup> The Greek is in two rows. The top row is illegible. The lower row reads *παῖς*, presumably the name of the deceased.



In the center compartment are two columns of Demotic characters and an ibis with a disc on its head, drawn in the ancient Egyptian style.

The heads of the masks were shaped in moulds,<sup>15</sup> then details, such as coiffure, dimples, cut of beard, and coloring, were added later by modelling, incision, and painting. These details may have been chosen to suit individual customers, but even so the mould left very little room for portraiture. Each artist would presumably possess moulds for a limited number of stock types, such as Greek youth, woman, or bearded man.

Among the earliest masks in the Toronto collection are the three female heads shown on pl. II, nos. 5, 6, and 7.<sup>16</sup>

Nos. 6 and 7 closely resemble a group of masks in the Cairo Museum<sup>17</sup> which are dated by C. C. Edgar in the first century A.D., probably in the Claudian period. In both masks Egyptian techniques predominate. The mouth with corners drawn inward, the narrow-bridged curving nose, the raised rim about the eyes extended beyond their outer corners, and the ears placed high and uncovered by the hair, all are features found in ancient Egyptian art.

Both masks had several long ringlets (all but two broken off) coming from behind the ears, filling in the space between head and shoulders in order to cover the wrappings of the mummy. This coiffure is very common on figures of Graeco-Egyptian goddesses, and appears to be a more naturalistic rendering of the heavy Egyptian wig.<sup>18</sup> In Claudian times ringlets were worn also by Roman ladies, such as Agrippina the elder,<sup>19</sup> who may have introduced them from the East. Small ringlets about the forehead as in no. 6, and possibly also small round curls as in no. 7, were worn in Hellenistic times,<sup>20</sup> and the latter especially were fashionable at Rome in the Claudian age.<sup>21</sup> No. 7 may, however, date from the Flavian period as its coiffure of squarish waves resembles that of a Flavian head from the tomb of the Haterii.<sup>22</sup> The tiara is common throughout the Hellenistic and Roman periods on coin portraits of queens and empresses.

The heavy-beaded Egyptian necklaces and hoop earrings worn by nos. 5 and 6 are typical of masks belonging to the first century A.D. The lumps on the earrings of no. 6 may represent beads or perhaps metal animal heads.

<sup>15</sup> The depressions remain on the reverse sides of the faces where the plaster was pressed into the mould. Also, in the later masks, which include the back of the head, the join of the two halves is visible on the inside.

<sup>16</sup> The heads of these three masks lay nearly or completely flat. Like all the others they are life-size. (The masks at Toronto range from 6½ to 9½ inches from chin to top of head). No. 5 and no. 7 are made of very thick plaster which is typical of the earlier masks. Like all the other masks the paint on the hair is well preserved and is dull black. The paint on the flesh has mostly worn off, but nos. 5 and 6 were probably pinkish brown, no. 7 yellowish brown.

<sup>17</sup> Edgar, pl. xxvi, nos. 33183-33189.

<sup>18</sup> For examples of Graeco-Egyptian masks wearing the Egyptian wig, see Edgar, pls. viii and ix, nos. 33129-33135. For Hellenistic examples of the long ringlets, see S. W. Grose, *Greek Coins in the Fitzwilliam Museum* iii, pl. 368, nos. 7-10 (coin portraits of the wives of Ptolemies VIII and X represented as Isis). Many examples also appear in Graeco-Egyptian terracottas.

<sup>19</sup> See A. Hekler, *Greek and Roman Portraiture*, pl. 213.

<sup>20</sup> See B. V. Head, *Guide to Principal Coins of the Greeks*, pl. 41, nos. 29 and 30, for a coin portrait of Cleopatra, wife of Antiochus VIII, ca. 125 B.C. She wears ringlets about the forehead, a tiara, and a mantle over the back of the head like mask no. 6, pl. II.

<sup>21</sup> See R. P. Hinks, *Greek and Roman Portrait-Sculpture*, pl. 26a, for a portrait of Agrippina the elder wearing small round curls about the forehead.

<sup>22</sup> See A. Hekler, *op. cit.*, pl. 237a.



No. 5 is of a somewhat different type from nos. 6 and 7, though of the same period. In the shape of head and in the use of a mantle with naturalistic folds instead of long ringlets it resembles some masks of the first century A.D. from Hawara in the Fayûm.<sup>23</sup>

All three masks may be compared to portrait v in the *Hawara Portfolio* (British School of Archaeology in Egypt and Egyptian Research Account) 1913. This portrait is of the very earliest type, as it includes the whole bust in imitation of the masks. It has a row of ringlets about the forehead and above that a mass of curls in Flavian fashion. It has a necklace similar to those of nos. 5 and 6, and serpent bracelets which are also very common on first-century masks.

The Cairo Museum collection of Graeco-Egyptian masks includes none like the two bald heads seen on pl. III, nos. 9 and 11.<sup>24</sup> Both have an Egyptian rather than a Greek physiognomy. Their baldness probably indicates that they represented Egyptian priests, a class frequently depicted in art and mentioned in literature from Hellenistic until late Roman times. It was their custom to shave their heads.<sup>25</sup> If these masks belonged to members of this group, then the fact that they used the same type of mummy decoration as the middle class Greeks is significant. In Egypt throughout the whole of antiquity the priests formed an important group.<sup>26</sup> They were treated with respect by the Ptolemies and Emperors, given financial support for their temples, and had a privileged legal status. Moreover they held a position of dignity in the eyes of the Greeks, who thought of the bulk of the native population as "inhuman Egyptians."<sup>27</sup> The temple seems to have been the center of Egyptian influence among the Hellenes of the provincial towns as the gymnasium was in Greek towns. Indeed, throughout the whole Roman world Egyptian priests were regarded with curiosity and sometimes with awe because of their ancient knowledge and traditions.<sup>28</sup> The Isis cult derived from them played a large part in the last centuries of classical paganism. In the end they seem to have become identified more with the higher classes and their Greek traditions rather than with the Egyptian

<sup>23</sup> See Edgar, pls. VII and VIII, nos. 33126-33128.

<sup>24</sup> No. 9 lay fairly flat, had striped wig-ends coming from behind the ears, and is modelled according to Egyptian technique. Therefore it probably belongs to the first century A.D. No. 11, however, must be later as it included at least a third of the back of the head and is free from Egyptian conventions. Both were reddish brown. No. 9 has a dark reddish brown line drawn between the lips. The irregular right eyebrow of no. 9 and the pointed chin of no. 11 may indicate attempts at portraiture. No. 9 is remarkably similar to a portrait in Petrie, pl. VI, no. 25.

<sup>25</sup> For references to this custom see Herodotus II, 36, and Apuleius, *Metamorphoses* XI. When the Isis cult spread outside Egypt among non-Egyptians the inner circle of male initiates continued this practice. In Egypt, in Roman times, a native priest could be fined by the civil authorities for letting his hair grow (Frank, *op. cit.* II, p. 648).

For representations of Egyptian priests in art, see Rostovtzeff, *op. cit.* II, pp. 886 and 1100. Here are five very interesting figures from Hellenistic and early Roman times. Also see T. L. Shear, "The Sculpture found in 1933," *Hesperia*, IV, 1935, pp. 405 f., for a head from Athens of the first century B.C. Also see *CAH*, vol. V of plates, p. 160b, for a Roman relief of an Isiac procession.

<sup>26</sup> For an account of the status of this class in Ptolemaic times, see Rostovtzeff, *op. cit.* I, pp. 265 f. and II, p. 884. For their status in Roman times see H. I. Bell, "Egypt under the Early Principate," *CAH*, X, p. 291. Also Frank, *op. cit.* II, pp. 639-670 (section on temple accounts).

<sup>27</sup> P. Oxy., XIV, 1681, letter of a Greek, Ammonius, in the third century A.D., containing statement, "You are, my brothers, perhaps considering me a barbarian or an inhuman Egyptian."

<sup>28</sup> See, for example, Tacitus' account of the visit of Germanicus to Thebes, where the priests translated for him hieroglyphs of the time of Ramses II (*Annals* II, 60).



peasantry, as the old religion retained its hold among the former at a time when the latter were predominantly Christian.

Mask no. 10, pl. III, probably dates from the first century A.D.<sup>29</sup> It had striped wig-ends (visible in the photograph) coming from behind the ears. These in the earlier male masks served the same purpose as the ringlets on the female heads. The use of deep vertical grooves to depict straight hair combed forward over the forehead is also found in sculpture.<sup>30</sup> In the style of hair and in the coloring this mask resembles the "Trajanesque" portrait from Hawara, which is said to represent a Spaniard.<sup>31</sup> Similar side-burns and moustaches occasionally appear in Hellenistic and Roman works, but the little chin beard is unusual and may be a survival of an ancient Egyptian fashion.<sup>32</sup> Some progress has been made in this mask toward a naturalistic technique in the modelling of mouth and eyes.

The remaining masks, except no. 12 on pl. III could, so far as their workmanship indicates, be contemporary, in spite of their differences. For, as this art was going through a period of change and experimentation, the masks vary much with locality and artist, and all do not progress with equal pace or by the same way to the type which finally becomes standard.

No. 8, pl. II<sup>33</sup> has a striped wig over the back of the head, a feature more common in the earlier masks. However, it resembles closely a mask in Edgar, *Coffins, Masks, and Portraits*, pl. xxv, no. 33177, dated as Antonine.

No. 13, pl. III<sup>34</sup> resembles, both in general form and in the style of hair and beard, a mask in Edgar (*op. cit.*), pl. xxii, no. 33158, dated by him as Hadrianic or early Antonine because of the beard and the locks combed forward over the forehead.

No. 14, pl. III (profile, pl. I, no. 3)<sup>35</sup> is unusual because of the high quality of its workmanship, even though in it the naturalistic technique has not been completely mastered.

Nos. 15, 16, 18, and 19, pl. IV (profile of no. 16, pl. I, no. 1), and the head of no. 4, pl. I<sup>36</sup> all bear many resemblances to certain masks in the Cairo Museum which Edgar groups as a series and assigns, because of their coiffures, to the latter half of

<sup>29</sup> The head lay flat. The color of the flesh, which is well preserved, is reddish brown. The wig is yellow with black and red stripes. The hair, short curly beard, moustache, and sideburns have been worked with a modelling instrument.

<sup>30</sup> See Hekler, *op. cit.*, pl. 194a.

<sup>31</sup> See Petrie, frontispiece, and introduction, p. 14.

<sup>32</sup> For examples of this type of beard see Rostovtzeff, *op. cit.* i, p. 416 (a Hellenistic terracotta of a lamplighter, probably from Alexandria), and Cooney, *op. cit.*, pl. 4 (a Graeco-Egyptian mask of the second century A.D.).

<sup>33</sup> The flesh of this mask was painted reddish brown. It has side-burns shaped in a mould, then worked with a tool.

<sup>34</sup> The flesh of this mask was probably reddish brown. The eyes are inlaid with opaque black and white glass, a custom more common in the second century than in the first or third. A layer of plaster has partly peeled off the nose and right cheek, and seems to have been added after the mask was taken out of the mould. The mask represents a Greek type.

<sup>35</sup> The flesh of this mask was reddish or yellowish brown. The eyes are inlaid with brown and white glass. The beard has been added by hand. The head is not completely disengaged from the mantle; therefore the mask was probably made about the middle of the second century.

<sup>36</sup> No. 16 has no trace of color on the flesh except for a pink line between the lips. No. 15 has pinkish brown paint on the lips, but no distinct trace on the rest of the flesh. The eyes are inlaid, and are edged with a narrow strip of blue glass. The use of this color about the eyes was an ancient Egyptian convention. This mask is almost identical in shape with the head of no. 4, though the measurements do not



the second century.<sup>37</sup> The four male heads especially resemble the one male head in that group (no. 33173).

The coiffure of no. 16 is unusual. The small twisted tresses in front of the ears, which are found also on no. 5, pl. II (profile, pl. I, no. 2), and in some of the portraits from the Fayûm, appear on a Hellenistic portrait head of a woman, sometimes called Cleopatra.<sup>38</sup> I can find no other examples of the peculiar coil at the back of the head, though buns and ordinary flat coils are common and were the fashion in the latter part of the second century.

No. 12, pl. III,<sup>39</sup> though a very poor piece of work, shows complete freedom from Egyptian conventions and technique, and may be compared to no. 13, pl. III, to reveal the progress made in a short period of time. It resembles, especially in the style of hair and beard, portraits of the Emperor Marcus Aurelius.

From this time on not only did many of the masks imitate the coiffures and even the faces of members of the imperial family,<sup>40</sup> but also their style of workmanship followed closely the varying trends in the main current of Graeco-Roman sculpture. For example, the increase in impressionism in the modelling of curly hair in sculpture between the time of Marcus Aurelius and Caracalla may also be seen in a comparison of the mask in the Toronto collection which resembles the former emperor (no. 12, pl. III) with no. 33148 in the Cairo Museum (Edgar, pl. XIX) which resembles the latter. And later masks executed in the same technique as contemporary sculpture the close-cropped hair of the third century, and also imitated the general dryness of modelling which then came into fashion.<sup>41</sup> This parallelism continued into Byzantine times.

#### *The Portraits in the Royal Ontario Museum.*

The portrait of the woman on pl. V and that of the child on pl. VI (middle) come from the Fayûm and are executed in the encaustic technique typical of this class of Graeco-Egyptian work.<sup>42</sup> A photograph of the woman has already appeared in Petrie, *Hawara and Memphis* IV, pl. VIII, H.

exactly correspond. No. 4 has pink flesh and rosy lips. The eyelashes are represented by fine vertical lines. Nos. 18 and 19 have small boyish heads, yellowish brown flesh (paint well preserved), and hair depicted by rows of incised lines on the skull. No. 19 is badly corroded. All five masks have very prominent eyelids.

<sup>37</sup> See Edgar, pl. XXIV, nos. 33165-33173, and introduction, p. VI, bottom, and p. IX, top.

<sup>38</sup> See Hinks, *op. cit.*, pl. 18a. This head is described as that of a woman of Levantine type, ca. 50 B.C. For examples in the portraits see Edgar, pl. XXXIV, no. 33222, and pl. XLII, no. 33263; also the *Hawara Portfolio*, pl. XVI.

<sup>39</sup> The flesh of this mask is pink. The beard has been shaped by the mould. The eyes are inlaid with thin convex sheets of transparent glass laid over the plaster on which the pupils have been painted, a method which came into use about the middle of the second century. On the back of the mask is an indistinct drawing in red paint.

<sup>40</sup> See Edgar, introduction, for the following comparisons: nos. 33174 and 33175 on Plate XXV to Plautilla and Julia Domna; no. 33148 on Plate XIX to Caracalla; no. 33206 on Plate XXIX to Alexander Severus; and no. 33211 on Plate XXX to Prince Diadumenianus. Also no. 33150 on Plate XX might be compared to a portrait of Faustina the younger (Hekler, *op. cit.*, Plate 281a); and no. 33149 on Plate XX to coin portraits of Otacilia Severa, wife of Philip the Arabian.

<sup>41</sup> For example see Edgar, pl. XXX, nos. 33210 and 33211. Also compare no. 33154, pl. XXI, to the third-century head of a boy in the Phaidon Edition *Roman Portraits*, pl. 74.

<sup>42</sup> In this technique the pigments were dissolved in wax, which was then used in a liquid or creamy state. (For a full account see Petrie, introduction, p. 9).



Though the former portrait is not one of the very best, yet the thick wax colors are skilfully laid on to give a life-like effect when viewed from a distance. The picture cannot be appreciated in a black and white photograph. The coiffure seems to belong to the type common from Flavian to Antonine times, in which the hair was parted across the top of the head and the back section plaited and arranged in a large coil about the crown. The hair at the front was arranged in various ways, sometimes in a high mass of curls,<sup>43</sup> sometimes in a series of smooth tiers,<sup>44</sup> sometimes combed straight forward over the brow,<sup>45</sup> sometimes gathered up into a knot above the forehead,<sup>46</sup> sometimes drawn back straight or in waves without elaboration.<sup>47</sup> The more simple styles belong to the Antonine period. Frequently the coil is visible over the top of the head,<sup>48</sup> as in the portrait under discussion. The ringlets in this example are a typically Graeco-Egyptian variation of the Roman fashion. The pendent earrings in this portrait are of a type most common in the second century A.D., for in similar examples of the first century only two drops are used,<sup>49</sup> and in later examples the horizontal bar is surmounted by a crescent.<sup>50</sup> The gold wreath, according to J. D. Cooney,<sup>51</sup> is "a pagan symbol comparable to a halo and was probably added when the painting was inserted in the mummy wrappings." Possibly it was regarded as equivalent to the wreath of flowers on head or in hand, for in the latest examples elements of both seem to be combined.<sup>52</sup>

Both the portraits mentioned were painted on thin wooden panels over a dark priming. The one on pl. v measures 8½ by 16 inches; that on pl. vi, 5¼ by 13 inches. The backgrounds of both were daubed with grey, but no paint remains on those parts of the panels which were covered by the mummy wrappings.

In the former portrait the hair is black with whitish grey highlights. The underpainting of the flesh is in dark yellowish brown; the overpainting is done in small quantities of rose, brownish purple, brown, and black, and with much whitish pink on the lighted parts of the face. The mantle is not in encaustic but in a resinous type of paint. It is purple, but almost black where the paint is laid on thickly. The earrings are gold with three pearl pendants. The upper necklace is of pearls and greenish black stones separated by gold beads. The lower is a gold chain, apparently knotted in the middle. The wreath is gold-colored.

The portrait of the child was painted wholly in the encaustic technique. The underpainting of the flesh is dark yellowish brown, the overpainting rose and light pink. A darker rose was used for the nostrils, for the line between the lips, for the shading under the eyes, and for the line about the top of the eyeballs. The eyes are outlined in black. The necklace is of pearls and greenish-black stones and is carelessly drawn. The mantle is lilac with a gold-colored stripe.

On the subject of mummy portraits, see Heinrich Drerup, *Die Datierung der Mummenporträts, Studien zur Geschichte und Kultur des Altertums XIX*. This work is particularly valuable on the development of style in the portraits.

<sup>43</sup> See coin of Julia, the daughter of Titus, Hekler, *op. cit.*, pl. 311, no. 1; and Edgar, pl. xli, no. 33256. Also *Roman Portraits*, Phaidon Edition, pls. 46 and 53.

<sup>44</sup> See coin of Marciana, sister of Trajan, Hekler, *op. cit.*, pl. 311, no. 3; Edgar, pl. xxxiv, no. 33222.

<sup>45</sup> See Antonine head of a girl, Hekler, *op. cit.*, pl. 282; and Petrie, pl. v, no. 53.

<sup>46</sup> See *Roman Portraits*, Phaidon Edition, pl. 52; and Petrie, pl. via, no. 21.

<sup>47</sup> See Antonine head in *Roman Portraits II (A Picture Book, Metropolitan Museum of Art)*, New York, 1941, no. 17; and Edgar, pl. xl, no. 33235.

<sup>48</sup> *Roman Portraits II (A Picture Book)*, no. 8; and *Hawara Portfolio*, nos. x, xvii and xix.

<sup>49</sup> See Edgar, introduction, p. x, re mask on pl. xxix, no. 33209.

<sup>50</sup> See B. Segall, *Katalog der Goldschmiede-Arbeiten, Museum Benaki, Athens*, no. 136.

<sup>51</sup> *Op. cit.*, page 15, note 2.

<sup>52</sup> See Cooney, *op. cit.*, pls. 3 and 13; and Edgar, pl. xlvii. In the latter, note the modelled wreaths of leaves and flowers about the heads.



The portrait of the child on pl. vi is painted in rather thin wax, and in fewer colors laid on with less skill than in the portrait of the woman. It shows a marked stylization of the face, suggestive of Coptic art, especially in the treatment of the eyes.<sup>53</sup> However, it was probably painted no later than the first half of the third century A.D. as the use of patches of light paint over a dark underpainting in depicting the flesh connects this work with the portraits painted in the best days of the encaustic technique. This is not the only example, as I shall shortly have occasion to demonstrate, of works produced well within the period when Graeco-Roman influence predominated, which, quite apart from the antique Egyptian style, reflect the native spirit and foreshadow Coptic art.

The remaining two portraits on pl. vi<sup>54</sup> are very unusual. They are drawn in very simple lines and have greenish-blue faces. They seem to be the work of an Egyptian, living in the second century A.D. or thereabouts, who was trained neither in the Egyptian nor in the Greek style of painting, but who had in mind Greek mummy portraits. He must have painted well before the fourth century A.D. by which time Coptic forms of art had taken shape; for in Coptic painting the eyes, and frequently the nose also, were heavily outlined all around, and figures usually face directly forward. However, the extreme simplification and unnaturalistic emphasis of essentials found in these portraits foreshadow the later type of art.<sup>55</sup>

Contact of the artist with Greek portraits is indicated first by the portions of the body shown in these two pictures—head, neck, and a little drapery; secondly, by the position of the head and neck—slightly turned to one side; thirdly, by the lines of eyes, nose, and chin, for in many Greek portraits the top lid of the eye is heavily drawn, the lower lid lightly shaded, and there is usually a dark shadow down one

<sup>53</sup> Cf. Cooney, *op. cit.*, pl. 3, a mummy portrait belonging to the fourth century A.D.

<sup>54</sup> The panel on the left measures 15 by 4½ inches, that on the right 14½ by 5¼ inches. Both are about 1¾ inches thick. Although the wood has rotted away much within, both panels retain their original shape, and are sawed level across the top, diagonally across the bottom. Up both sides are a number of peg holes, the pegs remaining in some, irregularly spaced. There is one peg hole in the bottom of each near the right hand corner, and near the top inner corner of each a peg has been driven through from the back.

The whole face of the board in each case has been painted white, except for about an inch at the top of one, and probably of the other also. Some white paint has been splashed on the top of each in the course of painting something else. There is some white paint on the sides of each which has poured over from the front, but there is none on the bottoms.

Both are painted in distemper. The outlines of the figures were first drawn in brownish purple, then the flesh was filled in with pale greenish blue, leaving the whites of the eyes uncovered. Nothing else has been added to the portrait on the right except for a touch of bright white paint in the corner of one eye. The other portrait, however, has a few black strokes over the purple in the hair, about the pupils and irises of the eyes, and around the lower part of the face, representing down or a short beard. The whites of the eyes are filled in with bright white paint. The upper part of the chest is depicted, painted heavy black with strokes of white representing drapery. The black has the same greenish tinge as that used on the other two portraits.

<sup>55</sup> For other examples of Egyptian art from the period of Greek cultural domination, which, like these two portraits, express a non-Greek spirit through art forms derived from the Greeks rather than from the ancient Egyptians, see Edgar, pl. xxix, no. 33209, for a stylized wooden head belonging to the first or second century A.D., and pl. xliii, no. 33269, for a picture of a girl skilfully drawn in a style like that of the Greek portraits, but showing a peculiar non-Greek intensity. Also see Drerup, *Die Datierung der Mumien-Porträts*, pl. 13a, for a portrait of a man of the time of Septimius Severus in which the features are heavily outlined in dark red-brown.



side of the nose, and circular shading about the chin. Last of all, there is some similarity between these two paintings and Greek portraits in respect to the methods used to portray individuality.

In painting the flesh of these portraits greenish-blue the artist probably had in mind the ancient Egyptian custom whereby Osiris, and certain other gods and goddesses connected with the dead, were colored green or blue.<sup>56</sup> These colors would be particularly suitable on a funerary monument.

Although these two panels do not fit together, they may have been joined by a third plank set between; for it is likely that they were both part of one monument. This is so first of all because of their similarity at all points; then, because of the opposite slants of their bases as though each formed one side of the same object, and finally, because of the narrow unpainted strip at the top of each panel with pegs driven through from behind as though one board had been fastened across the face of both. They may have belonged to a monument similar in form to a small aedicula (Edgar, pl. XLIII, no. 33269) which contains a portrait mentioned in my last note as an example of Egyptian work. In this monument the portrait is painted on a rectangular piece of wood set on a plinth, and has a small projecting roof supported by two pillars. The whole is held together by pegs. On the same plate as the aedicula is a second work (no. 33267) of a type to which the two Toronto panels may belong. This is a portrait of two brothers painted on a large circular panel, the two halves of which have been joined together. The two blue heads, seen in juxtaposition, seem almost a caricature of this work.

The amphora painted at the bottom of each panel requires explanation, for neither amphorae nor any other type of vessel figures in earlier masks and portraits. However, in masks and portraits of Byzantine and Coptic style a small vessel, sometimes an amphora, is usually held in one hand, a wreath in the other.<sup>57</sup> This vessel seems to have been abstracted from a scene which is frequently found on Graeco-Egyptian funeral stelae of the second, third, and fourth centuries A.D.,<sup>58</sup> in which the deceased reclines at meat, holding a cup in his hand. About him on the floor, are small tables, jars, loaves, bundles of stalks, baskets of fruit, and other provisions. In this scene the jackal-headed Anubis, sometimes appears, a deity who, on the wrappings of earlier Graeco-Egyptian mummies, was sometimes represented standing over the deceased holding a cup in one hand.<sup>59</sup> The provisions about the couch resemble those usually depicted on the walls of Egyptian tombs for the sustenance of the dead. The two blue portraits at Toronto and also the small aedicula mentioned above<sup>60</sup> are early examples of the abstraction of the cup (and other objects) from the scene which gave them their significance.

<sup>56</sup> Cf. Edgar, pl. x, with description in Catalogue, page 20.

<sup>57</sup> See Cooney, *op. cit.*, pl. 3, for a portrait in the Coptic style belonging to the fourth century; Edgar, pls. XLVI and XLVII, for mummies decorated in Byzantine style belonging to the fourth or fifth century. All hold jars or cups.

<sup>58</sup> Edgar, *Greek Sculpture (Catalogue général, Musée du Caire)*, 1903, pls. XIX to XXIV, and introduction, p. XII. See especially pl. XX, no. 27538, on which stela is an amphora similar to those on the Toronto panels.

<sup>59</sup> Edgar, *Coffins, Masks, and Portraits*, pl. XXXI; F. Cumont, *Oriental Religions in Roman Paganism* (English edition, 1911), p. 102, for an account of the Egyptian prayer used in the Graeco-Roman Isis cult, that Osiris (who was closely connected with Anubis) grant the dead cooling water.



*Conclusion.*

The most remarkable development in Egyptian art during the Roman period was the complete abandonment, on the part of every type of artist and craftsman, of the ancient Egyptian artistic conventions which had prevailed unchanged since early dynastic times. Through political and religious conservatism (or in some cases antiquarianism) the ancient style lingered on in particular types of work as late as the third or fourth century A.D. Its political use in the great temples built by the emperors following the example of the Pharaohs and Ptolemies ended during the turbulent years of the third century.<sup>61</sup> In the religious field it was more tenacious. On a mummy belonging probably to the fourth century<sup>62</sup> the hawk wings of Horus and a mythological scene were painted, albeit carelessly, in the ancient style. On two later mummies, however,<sup>63</sup> Egyptian symbolic figures, though still used, were presented in quite a new manner, as though they were designs on a rich Byzantine textile. With the dying out of the old religion the symbols too disappeared.

Some partially Hellenized Egyptian works were produced in the Ptolemaic period, but the rapid and thorough change of style illustrated by the plaster masks does not take place until the first and second centuries A.D. This fact would appear to support the statement of A. W. Lawrence<sup>64</sup> that "the Greek colonies were in fact being absorbed in the surrounding population when the Romans revived their culture by increasing their political importance."

Even though the Greeks were but a small minority amidst the native population, the Egyptian style died out so thoroughly that, in Coptic times, when a new indigenous culture took shape its art, in form at least, derived not from ancient Egypt but from Greece and Rome. For ancient Egyptian art had been, at its core, the refined expression of a native upper class in cultural continuity with the past and could not endure indefinitely after this class had been succeeded by the Greeks. The successors in their turn never produced any great work out of the combined Greek and Egyptian elements that made up their culture. The Graeco-Egyptian mummy, a typical example, is a spectacle of ugliness, mediocrity, and incongruity. Later, from the fourth century onward, two types of art are found in Egypt, the native Coptic and the Byzantine, still marking the existence of two elements in the population. The distinction between the two is not so marked, however, as that between Egyptian and Greek art in earlier times; moreover, each in itself shows a certain harmony of form and feeling that could not be attained so long as elements taken from ancient Egyptian art continued to be combined with Greek.

TORONTO, CANADA

MARY McCORMON

<sup>60</sup> Edgar, pl. XLIII, no. 33269. On the plinth of this aedicula appear baskets of fruit, bundles of stalks, and bunches of grapes or dates, as well as an amphora on a stand and two drinking cups. However, as a rule only the cup or jar is used on the portraits or mummy decorations.

<sup>61</sup> J. G. Milne, *Egypt under Roman Rule* (in Petrie, *History of Egypt*), p. 70; the Emperor Decius seems to have been the last to have left his cartouche and representation in the manner of a Pharaoh on an Egyptian temple.

<sup>62</sup> Edgar, pl. XLVI, no. 33276.

<sup>63</sup> Edgar, pl. XLVII.

<sup>64</sup> *Later Greek Sculpture*, p. 67.



## THE DATE OF THE OLYMPIA HERAEUM

THE cornerstone for nearly all discussions of the evolution of the Greek temple is the Heraeum at Olympia (fig. 1). Here the type first attained monumental proportions; preceding it are only the scanty foundations of primitive and faltering experiments; but immediately after it begins the stately series leading to the Parthenon. The date



FIG. 1.—THE HERAEUM FROM THE SOUTHEAST

assigned to this fundamental temple, however, has vacillated over a period of five centuries.

For the existing Heraeum, as is well known, Dörpfeld finally abandoned his originally suggested date of 1096 B.C. (based on Pausanias v, 16, 1),<sup>1</sup> upon finding traces of earlier temples beneath it. Such traces of earlier construction were first discovered in 1907, and were then interpreted as remains of an early altar.<sup>2</sup> By

<sup>1</sup> Dörpfeld, in *Hist. und philol. Aufsätze Ernst Curtius*, pp. 148–150 (trans. *AJA.* 1885, pp. 51–53); *Olympia, Ergebnisse* ii, pp. 28–36; supported by Noack, *JdI.* 1896, pp. 225–228. We may continue to follow Pausanias in calling the temple the Heraeum. Vacano (*Das Problem des alten Zeustempels in Olympia*, Diss. Köln, 1937, pp. 27–39) suggests that it was originally a temple of Zeus Olympius alone. It seems more plausible to regard it as a temple of Zeus and Hera together, until Zeus vacated it (leaving his old statue behind) upon the dedication of his new temple about 460 B.C.

<sup>2</sup> Dörpfeld, *AM.* 1907, p. v.



1909 it had become apparent that the earlier remains were those of a temple, and even that there were seemingly two earlier temples below the present structure; but this observation was not reported until thirteen years later.<sup>3</sup> The first temple, merely a walled cella without a peristyle, was assigned by Dörpfeld to the eleventh century B.C. in accordance with Pausanias. This was destroyed by fire and replaced by the second, a peripteral temple identical in plan with the third (or present) temple but at a slightly lower level; the second temple was at first assumed to have been completed even to the roof, for which the existing roof terracottas (re-employed in the third temple) were originally made. According to Dörpfeld's final interpretation the second temple was never finished, possibly lacking even its stylobate, and was followed almost immediately at the beginning of the ninth century by the present temple at a slightly higher level, for which the roof terracottas were specially made. Such were the conclusions drawn from the supplementary excavations of 1906-09, 1922-23, and 1927-29.<sup>4</sup>

On the other hand, Furtwängler's analysis of the objects discovered in the lower strata of the precinct before 1880 had convinced him that nothing at Olympia dated earlier than 1100 B.C., and no bronzes, in particular, earlier than the eighth century.<sup>5</sup> Such bronzes were discovered in the black stratum far below the floor of the Heraeum in 1880; but Furtwängler momentarily avoided polemics and merely listed them without attempting to determine the date of the temple,<sup>6</sup> other than to imply that it might be as early as, but not before, the eighth century.<sup>7</sup> Puchstein, however, taking into consideration both these finds and the developed plan, concluded that the temple could not be dated before the seventh century, and was followed by Graef and Borrmann.<sup>8</sup> Immediately upon receiving news of the supplementary excavations in 1906, furthermore, Furtwängler published a detailed study, based primarily on the objects discovered beneath the floor, and concluded that the temple dated in the second half or even the end of the seventh century.<sup>9</sup> Those who have reported on the small finds uncovered under Dörpfeld's supervision, namely, Steiner in 1906, Weege in 1911, and Buschor and Schweitzer in 1922, have all been influenced by Furt-

<sup>3</sup> Dörpfeld, *AM.* 1922, p. 31; *Alt-Olympia*, 1936, p. 19. His theory of three successive temples—though not his dates—has been accepted by Gardiner, *Olympia*, 1924, p. 216; Dinsmoor, Anderson, Spiers, *Architecture of Ancient Greece*, 1927, p. 64; Robertson, *Greek and Roman Architecture*, 1929, p. 62; Weickert, *Typen der archaischen Architektur*, 1929, pp. 34-42; Vacano, *op. cit.* 1937, p. 47.

<sup>4</sup> See Dörpfeld, *AM.* 1906, pp. 205-218; 1907, pp. iv-vi; 1908, pp. 185-187; *JdI.* 1907, *AA.* 109; 1908, *AA.* 127-129; 1922, *AA.* 308-309; *AM.* 1922, pp. 30-42; 1925, pp. 82, 102-106; *Gnomon*, 1929, pp. 269-270; *JdI.* 1929, *AA.* 592-595; 1930, *AA.* 115-120. This material is now published in final form in Dörpfeld, *Alt-Olympia*, pp. 1-28, 129-185, 190-214.

<sup>5</sup> Furtwängler, "Bronzefunde aus Olympia," *Abh. Berl. Akad.* 1879, iv; *Kleine Schriften* i, pp. 339-421. Accepted by Michaelis, *Century of Archaeological Discoveries*, p. 127.

<sup>6</sup> *Olympia* iv, pp. 2-3, 28 (with n. 2), 29, 38, 72, 167.

<sup>7</sup> Certain later objects which were reported as coming from below the Heraeum, namely, a bronze horse in Berlin (inv. no. 8091, cf. *Olympia* iv, p. 28 n. 1), and two or three noseguards of Corinthian helmets (which could not be earlier than the seventh century, *Olympia* iv, p. 167), were at that time rejected by Furtwängler as conflicting too violently with the official theory of the Heraeum's date (cf. *Sb. Mün. Akad.* 1906, p. 468).

<sup>8</sup> Puchstein, *JdI.* 1896, pp. 70-71; Graef, *JdI.* 1900, *AA.* 201-202; Borrmann, *Baukunst des Altertums*, 1904, p. 104.

<sup>9</sup> Furtwängler, *Sb. Mün. Akad.* 1906, pp. 467-484; *Kleine Schriften* i, pp. 446-457.



wängler's system of chronology, and have interpreted the finds accordingly.<sup>10</sup> Hence most of the recent critics have adopted a date late in, or even at the end of, the seventh century.<sup>11</sup>

Before we can fully utilize this evidence, however, we must discuss the sequence of the temples (fig. 2).<sup>12</sup> With regard to the earliest there can be no doubt. The difference of construction, with the rebated floor slabs, of which some are in position 1.34 m. below the present cella pavement,<sup>13</sup> while others are immured as second-hand material low in the foundations,<sup>14</sup> and the burnt stratum immediately above this earlier floor level,<sup>15</sup> as well as the fact that the older foundations are in part located for walls in different positions than those of the present temple,<sup>16</sup> prove that we are here concerned with an early temple which we may designate as the non-peripteral

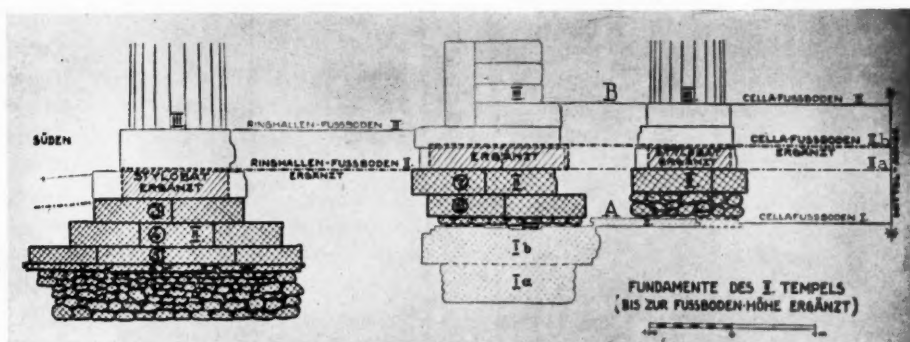


FIG. 2.—SECTION SHOWING LEVELS OF HERAEUM I (A), II (FICTITIOUS), AND III (B)

Heraeum A (Dörpfeld's Heraeum I). With regard to the so-called second temple (II), on the contrary, there is no actual evidence for its existence; the differences between the lower foundation courses of the peristyle and the two upper courses<sup>17</sup> are merely

<sup>10</sup> Steiner, *AM.* 1906, pp. 219–227; Weege, *AM.* 1911, pp. 190–192; Buschor and Schweitzer, *AM.* 1922, pp. 48–52.

<sup>11</sup> Not before the seventh century: Wolters, in Springer, *Kunstgesch.* i<sup>10</sup>, p. 167; *id.* i<sup>11</sup>, p. 165; *PW.* 1920, 334–336; Rodenwaldt, *AM.* 1919, p. 183. About 700: Robertson, *op. cit.* p. 62; or 640: *ibid.* p. 324. About 620: Dinsmoor, in Anderson and Spiers, *Architecture of Ancient Greece*, pp. 64, 193; in the new edition, of which the publication is delayed by the war, I have shifted the date to about 590 B.C. End of seventh century: Frickenhaus, *Tiryns* i, p. 7 n.; Weickert, *Typen*, p. 42. Hardly before 600: Lehmann-Hartleben, *Gnomon*, 1927, p. 390. After 571/0: Vacano, *op. cit.* pp. 46–47, applying to this building the reference made by Pausanias (v, 10, 2) to the destruction of Pisa by the Eleans in 571/0 B.C., which Pausanias mistakenly cited as the source of booty from which the great fifth-century temple of Zeus was erected. Gardiner's attempt to associate the present temple with Pheidon of Argos, about 740 B.C. (Gardiner, *Olympia*, pp. 11, 88, 92, 207), was abandoned by him in a supplementary note (p. 216) after the publication of the new evidence. On the other hand, Drerup (*PW.* 1919, 1220, n. 4) opposed Wolter's late dating on the ground that the potsherds are of local manufacture and are not correctly dated by Weege.

<sup>12</sup> *Alt-Olympia*, p. 155 (fig. 37), with alterations. Dörpfeld's floor level II ("ergänzt" together with the stylobate course) is here marked IIb, while the alternative lower level (as shown in his pl. 13) is marked IIa. The letters A and B are inserted as equivalents of Dörpfeld's I and III.

<sup>13</sup> *Ibid.* p. 141 (fig. 29), pls. 13, 14.

<sup>14</sup> *Ibid.* pls. 13, 15.

<sup>15</sup> *Ibid.* p. 143 (fig. 31), pls. 10, 13–16.

<sup>16</sup> *Ibid.* pp. 139 (fig. 27), 143 (fig. 31), pls. 9, 10, 16.

<sup>17</sup> *Ibid.* pp. 154–156, 162.



those which one would normally expect between foundation construction on the one hand, the euthynteria and stylobate on the other; nor do the so-called differences in the cella building<sup>18</sup> seem in any way conclusive. The so-called floor levels in the stratification are vague and seem to be of no more importance than the other horizontal streaks which are admittedly the results of dressing off the tops of successive foundation courses;<sup>19</sup> indeed, so vague are these traces that Dörpfeld himself was uncertain whether that at the top of the fourth or that at the third course below the present cella floor should be preferred as the second floor level.<sup>20</sup> In view of the fact that the stylobate and floors of the so-called second period were admittedly never laid, it would seem a work of supererogation to search for definite floor levels. Nor do the contents of the strata below and above the assumed floor levels of the hypothetical Heraeum II show any appreciable difference; the whole deposit above the burnt debris of Heraeum A seems to be fairly homogeneous. It would seem, therefore, that Dörpfeld's Heraeum II and Heraeum III should be merged into one, which we may designate as the peripteral Heraeum B.<sup>21</sup>

Turning now to the absolute dates, it is apparent that the bronze statuette of a helmeted man discovered in 1906,<sup>22</sup> about 1.50–1.60 m. below the opisthodomus stylobate, was about 0.45 m. below the bottom of the burnt stratum which marks the floor level of Heraeum A.<sup>23</sup> It is now generally agreed, therefore, that this statuette is older than Heraeum A;<sup>24</sup> and, indeed, it does not seem that it could have percolated through the burnt stratum at a later date. It is generally agreed, furthermore, that the statuette is subgeometric, with oriental influence in the treatment of the hair; but opinions as to the absolute date vary. Dörpfeld would attribute it to the second millennium,<sup>25</sup> Karo to a date well back in the eighth century,<sup>26</sup> Lippold to a period no earlier than 750 B.C.,<sup>27</sup> Kunze to about 700 B.C.,<sup>28</sup> Furtwängler to the first half of the seventh century,<sup>29</sup> Steiner to a period before the sixth century.<sup>30</sup> Assuming that it is shortly after 750 B.C., we find ourselves in agreement with the presence of a few subgeometric Protocorinthian sherds (or local imitations) with linear decoration beneath the floor level of the first temple, at the very level of the bronze statuette, at points where they must have lodged before the building of Heraeum A.<sup>31</sup> In other words, Heraeum A is probably to be dated soon after 725 B.C.<sup>32</sup> This in turn would demand a considerably later date for its successor, Heraeum B.

<sup>18</sup> *Alt-Olympia*, pp. 156–160, 162–163.

<sup>19</sup> *Ibid.* p. 143 (fig. 31), pls. 10, 13–16.

<sup>20</sup> *Ibid.* pp. 159, 163; contrast fig. 37 (p. 155) and pl. 13 (also fig. 2 of this article).

<sup>21</sup> This interpretation was first advanced in my lectures before the Archaeological Institute in 1939–40, when I likewise presented my views on the rebuilding of the temple of Zeus (*AJA*, 1941, pp. 399–427). [W. B. D.]

<sup>22</sup> Dörpfeld, *AM*, 1906, p. 212; Steiner, *AM*, 1906, pp. 219–227, pl. VIII; cf. *AM*, 1908, p. 186; *Alt-Olympia*, pp. 11, 202–203, 214, 445–446, 454–455. Others of more primitive character were discovered far below the temple, both in the original (*Olympia* iv, pp. 38, 41, pl. xv, nos. 256, 261, 262; *Alt-Olympia*, p. 214; Müller, *Frühe Plastik*, pl. xxii no. 287) and in the supplementary excavations (*AM*, 1906, pp. 211–212, figs. 4–7); but these are naturally of less value for the date *post quem*.

<sup>23</sup> The position is shown in *Alt-Olympia*, p. 143 (fig. 31), pls. 15, 16.

<sup>24</sup> Dörpfeld, *AM*, 1907, p. v; 1922, pp. 37–38; 1925, p. 103; *Alt-Olympia*, p. 446; and all others.

<sup>25</sup> *Alt-Olympia*, pp. 17, 135, 445–446.

<sup>26</sup> *JdI*, 1908, *AA*, 128.

<sup>27</sup> *PW*, 1936, 1379.

<sup>28</sup> *AM*, 1930, pp. 159–160; cf. Vacano, *op. cit.* pp. 44–45.

<sup>29</sup> *Sb. Mün. Akad.* 1906, pp. 469–474.

<sup>30</sup> *AM*, 1906, p. 227.

<sup>31</sup> Dörpfeld, *AM*, 1922, p. 32; Buschor and Schweitzer, *AM*, 1922, p. 49.

<sup>32</sup> Dated after 750 B.C.: Lippold, *PW*, 1936, 1379. End of eighth century at the earliest: Weickert, *Typen*, p. 36. Not much before 700 B.C.: Vacano, *op. cit.* p. 45.



In the burnt stratum which lay directly on the floor level of Heraeum A, 0.09 m. thick in the cella (with its top 1.25 m. below the present cella floor) and 0.21 m. thick in the opisthodomus (where it is 0.07 m. lower),<sup>33</sup> no Corinthian pottery was discovered, in fact, no pottery dating later than 625 B.C.<sup>34</sup> A seeming discrepancy, the report that in the burnt stratum was found a claw foot attributed to Hera's throne<sup>35</sup> (which, in accordance with the style of the head identified as that of the cult statue of Hera (fig. 6), could hardly be dated earlier than 600 B.C.), is impossible to reconcile with any conceivable date for the temple, since Pausanias saw the cult statues presumably intact in 175 A.D. above the floor of the present temple. The existence of the fragment at such a low level might possibly be explained as the result either of inaccurate observation at the moment of discovery,<sup>36</sup> or of percolation to a low level in the course of later repairs of the floor;<sup>37</sup> but both explanations seem unlikely. Also unsatisfactory is the possibility that the cult statue was made for an earlier temple and suffered injury while being transferred to the present structure; for its style is by no means early enough for the only preceding Heraeum (A). The best explanation is that this paw is quite unrelated to the cult statue's throne; on it rests a man's foot in the attitude of an assailant, in a position which would be impossible against the foot of a throne, so that we may assign it, as Hampe suggests,<sup>38</sup> to an independent votive offering of a man attacking a lion — which may have been broken up during the destruction of Heraeum A. It would seem, therefore, that the accumulation of offerings within Heraeum A included nothing later than the end of the seventh century, and consequently that the destruction of this temple by fire may have occurred toward 600 B.C.

In the building debris of Heraeum B, above the burnt stratum of its predecessor, were found subgeometric Protocorinthian sherds with linear ornament, some local ware with a light slip and parallel circumferential lines,<sup>39</sup> and also some varnished local ware with red and white linear ornament, of later date than that below the floor level of Heraeum A.<sup>40</sup> But these sherds merely suggest a date later than the eighth century.<sup>41</sup> Definitely later, however, were two or three bronze noseguards of Corinthian helmets which could not be traced back of the seventh century.<sup>42</sup> There

<sup>33</sup> *Alt-Olympia*, p. 143 (fig. 31), pls. 10, 13–16.

<sup>34</sup> *Ibid.* p. 204; Lippold, *PW.* 1936, 1379.

<sup>35</sup> Dörpfeld, *AM.* 1906, p. 210, Beil.; 1922, pp. 32, 39; *Alt-Olympia*, pp. 151, 203–204, fig. 54; *AM.* 1935–36, pl. 95, fig. 1.

<sup>36</sup> The fragment was found in hole "H 40" immediately in front of the cult basis of the present temple, and was inscribed with the depth 1.30 m. by the foreman of the laborers (*Alt-Olympia*, p. 151, cf. pls. 9, 10). The assumption that it was actually found in the burnt stratum is due, therefore, to recalculation.

<sup>37</sup> Dörpfeld himself first assumed that the fragment had reached this depth because of some later repair of the Heraeum floor (*AM.* 1906, p. 210). In this connection it may be noted that Buschor and Schweitzer mention roof tiles of the present Heraeum as having been found below its floor level, having percolated down in the course of a repair of the cement floor (*AM.* 1922, p. 50).

<sup>38</sup> Buschor, *AM.* 1927, p. 211; Hampe, *AM.* 1935–36, pp. 278–279.

<sup>39</sup> Weege, *AM.* 1911, p. 190, fig. 24, nos. 6, 7, 9, 10 (found 0.60–0.80 m. below the floor); Dörpfeld, *AM.* 1922, p. 32; 1925, p. 103.

<sup>40</sup> Buschor and Schweitzer, *AM.* 1922, pp. 49–50.

<sup>41</sup> For instance, Johansen (*Vases sicyniens*, p. 88) assigns Weege's pieces nos. 9–10 to his subgeometric group (725–650 B.C.).

<sup>42</sup> *Olympia* iv, p. 167; Furtwängler, *Sb. Mün. Akad.* 1906, p. 468; cf. Wolters, *PW.* 1920, 336.



were also a griffin head of cast bronze,<sup>43</sup> of the type current in the seventh century,<sup>44</sup> and some bronze strips with orientalizing decoration, guilloche bands or terminal palmettes.<sup>45</sup> In the same levels of building debris were also found Corinthian potsherds,<sup>46</sup> necessarily later than the beginnings of this style at about 625 B.C. But most significant of all was the discovery of an early Corinthian alabastron (bombylios) low in the rough foundations of the south peristyle,<sup>47</sup> in such a position that it must have been dropped there during the laying of the foundations.

The only publication of this vase is Dörpfeld's drawing (fig. 3).<sup>48</sup> Assuming that the details in the drawing are correct, the evidence for the date of the vase is clear.

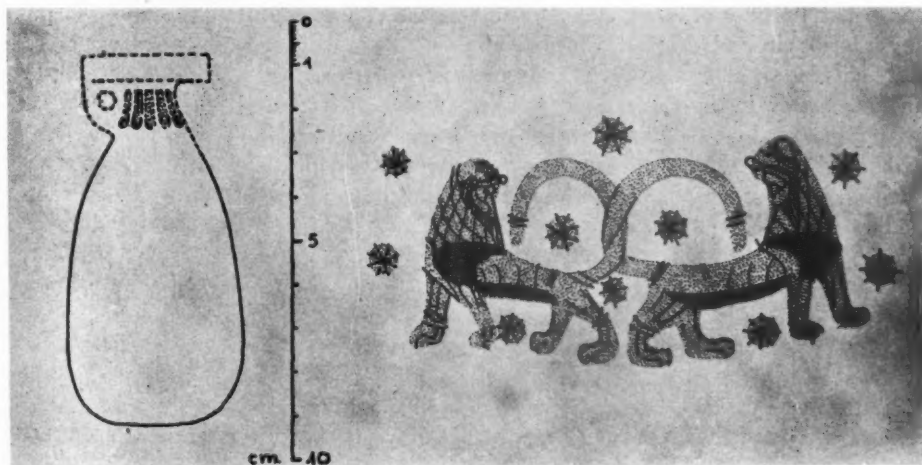


FIG. 3.—ALABASTRON FOUND BELOW HERAEUM B, AS PUBLISHED BY DÖRPFELD

The size and contours of the alabastron place it in the Early Corinthian period.<sup>49</sup> Dörpfeld gives its height as approximately 0.08 m.<sup>50</sup> The neck of the vase, however, is missing; and if Dörpfeld's sketch is compared with photographs of alabastra belonging to the Early Corinthian group,<sup>51</sup> it will be seen that the neck, as he restored it, is too short and thick for the proportions of the rest of the vase. The complete alabastron was, therefore, probably between 0.08 and 0.09 m. in height. The bottom is somewhat flattened as are also the curves of the sides (if the curvature is correctly shown in Dörpfeld's drawing).

This classification by shape and size is corroborated by the decoration. The alabastron is apparently not divided into zones or bands of pattern as in the Proto-corinthian period. Instead, one pattern is spread over the whole surface of the ala-

<sup>43</sup> Buschor and Schweitzer, *AM.* 1922, p. 50; Dörpfeld, *AM.* 1925, p. 103.

<sup>44</sup> Lamb, *Greek and Roman Bronzes*, p. 71.

<sup>45</sup> See note 43.

<sup>46</sup> *Alt-Olympia*, pp. 27, 204.

<sup>47</sup> The position is shown in *Alt-Olympia*, pl. 10, middle (cf. pp. 24, 27, 210; also *Gnomon*, 1929, p. 269).

<sup>48</sup> *Alt-Olympia*, p. 211, fig. 55.

<sup>49</sup> Payne, *Necrocorinthia*, pp. 269-70, 275, 281, 303, for the history of the alabastron.

<sup>50</sup> *Alt-Olympia*, pp. 24, 211.

<sup>51</sup> Payne, *op. cit.* pl. 17.



bastron without even the addition of boundary lines above and below.<sup>52</sup> The pattern in this case is made up of two lions with tails interlocked. Solid, incised rosettes are used as filling ornament. The only other decoration would have been on the neck, mouth, and bottom. Dörpfeld has restored tongues on the neck, and this is undoubtedly correct. On the upper surface of the mouth, one would expect to find more tongues, and, on the edge of the rim, dots. Dörpfeld does not tell us what was on the bottom of the alabastron, which was always decorated—a rosette or more tongues? This one-over-all pattern is characteristic of the Early Corinthian period. On earlier alabastra the surface is divided into bands of pattern;<sup>53</sup> later alabastra are larger and, when one design covers the whole body of the vase, it is framed above and below by lines of black glaze.<sup>54</sup> Furthermore, the solid, incised rosette without any interior circles is an Early Corinthian filling ornament; and the lions, with cross-hatched manes, elongated bodies, incised belly stripes, ribs, thighs, and shoulder line, are drawn in the Early Corinthian manner.<sup>55</sup>

All of the evidence—the size and shape of the alabastron, the one-pattern-over-all scheme of decoration, and the patterns themselves—indicate that this alabastron, found in the foundations of Heraeum B, belongs in the Early Corinthian period. It would, therefore, be dated between 625 and 600 B.C., or 590 B.C. at the very latest.<sup>56</sup> It does not represent the earliest work of the period and it is probably to be dated ca. 600 B.C.<sup>57</sup>

Dörpfeld regards the alabastron as decisive for the dating of Heraeum II; but, since we have concluded that there was no such structure, we are spared the embarrassment of making the present Heraeum (III) still later, and may assume that the earliest date at which the vase could have been discarded, presumably sometime in the first decade of the sixth century, was that of the laying of the foundations of the present Heraeum B.

Further evidence for an early sixth century date for the Heraeum is found in the great disc acroterion, 2.31 m. in diameter, which adorned the top of the temple.<sup>58</sup>

<sup>52</sup> That there was only one pattern spread over the whole body of the alabastron is indicated both by Dörpfeld's drawing and by his description of it (*Alt-Olympia*, p. 24): "—ein korinthisches Alabastron von etwa 8 cm. Höhe mit zwei flüchtig eingeritzten und bemalten Löwen, deren Schweife einen Kreis mit mittlerer Rosette bilden."

<sup>53</sup> Payne, *op. cit.* pp. 118, 275.

<sup>54</sup> *Ibid.* pl. 36.

<sup>55</sup> *Ibid.* p. 49, n. 1.

<sup>56</sup> For a discussion of the chronology of Early Corinthian ware, see Payne, *op. cit.* pp. 21–27; 55–57.

<sup>57</sup> Lippold dated the alabastron 600 B.C. or not much earlier (*PW.* 1936, 1380), S. B. about 600 B.C. (*JHS.* 1936, p. 82). Vacano (*op. cit.* p. 47) interprets it as a late Corinthian aryballos. The absence of the dot-rosette, the careless drawing of the lions, and, above all, the contours of the alabastron, indicate that it does not belong at the beginning of the Early Corinthian period. I cannot match the flattened curves of the sides of the alabastron on any other example from this period and, if these contours are accurately drawn, the vase must be placed very near the end of the Early Corinthian period. Unfortunately the other Corinthian potsherds discovered in the foundations of the later temple (Dörpfeld, *Alt-Olympia*, pp. 27, 204) have not been described or dated. To agree with his earlier date of the temple, Dörpfeld of course assigns the alabastron to the ninth century (*ibid.* pp. 386, 390).

<sup>58</sup> *Olympia, Ergebnisse* ii, p. 190 and pl. cxv. The acroterion is reconstructed in fig. 4, however, in the form which it undoubtedly presented originally, the lower edges forming an obtuse angle to fit the apex of the pediment (as suggested in the preliminary publication, *Olympia, Ausgrabungen* v, pl. 34, and also, for Bassae, by Rhomaïos, 'Εφ. 1933, pls. 1–2), as contrasted with the improbable horizontal base (as given in the final publication, cited above, and also, for Bassae, by Stevens, in Van Buren, *Greek Fictile Revetments in the Archaic Period*, pl. 17).



Such disc acroteria and antefixes comprise the principal architectural ornament of temples of the seventh and sixth centuries in Laconia. Disc acroteria are not found on the mainland of Greece outside the Peloponnesus, though two fragments have been found in Aegina. It would seem likely, therefore, that these acroteria represent a local style of architectural ornament and were manufactured at some place in Laconia, probably in Sparta, since the greater number of fragments comes from sites in and around that city.<sup>59</sup> The Heraeum was roofed with tiles of the Laconian shape and the glaze and the clay of these are said to be indistinguishable from those of Spartan make.<sup>60</sup> Both the tiles and the acroterion were probably imported from Sparta for the temple.<sup>61</sup> We may, therefore, turn to Laconian pottery for patterns that may provide us with chronological evidence.

<sup>59</sup> At Sparta were found, not only the pieces of at least eight disc acroteria in the sanctuary of Artemis Orthia (*Artemis Orthia*, pp. 126–29), but also others in the neighboring Heroon (*ibid.* p. 118), in the Chalkioikos (*BSA*. xxviii, 1926–27, p. 41, fig. 2), in the Menelaion (*Artemis Orthia*, p. 120, fig. 89) and in the Amyklaion (*AM*. 1927, p. 44, fig. 23). Others were found at Cynouria (Πρακ. 1911, p. 260, fig. 3; Van Buren, *op. cit.* p. 180, no. 5); Tegea (Πρακ. 1907, p. 120); Pallantion Vigla (Πρακ. 1910, p. 276; the fragments published by Mrs. Van Buren, *op. cit.* fig. 15, really come from Mantinea, cf. Rhomaïos, 'Εφ. 1933, p. 9, n. 2); Arcadian Orchomenos (*BCH*. 1914, p. 84); Mantinea (Koch, *RM*. 1915, p. 88, fig. 42; Van Buren, *op. cit.* fig. 109); and Crestaina ('Εφ. 1931, p. 47) as well as the example at Bassae ('Εφ. 1933, pp. 1–25, pls. I–III). Related antefixes were found at Sparta in the sanctuary of Artemis Orthia (*BSA*. xii, 1905–06, p. 322; Koch, *RM*. 1915, p. 92, fig. 15; Van Buren, *op. cit.* p. 134, no. 2; Dawkins, *Artemis Orthia*, pp. 122–26, 137–39, figs. 92–99, pl. xxv), on the Acropolis (Dawkins, p. 122, no. 11) and north of the Sanctuary of Orthia (Dawkins, p. 125, fig. 95); at Amyklai (*AM*. 1927, pp. 43–44, fig. 22, beilage x, 1–3); Bigla (Van Buren, p. 135, no. 6; Dawkins, p. 122, n. 11); Epidaurus Limera (Van Buren, p. 135, no. 3; Dawkins, p. 122, fig. 91; *RM*. 1915, p. 95); probably the examples at Lusoi (Van Buren, p. 182, no. 17, fig. 17; p. 180, no. 6, fig. 17; *JOAI*. 1901, p. 61, fig. 128; *RM*. 1915, p. 90) and Methydriion (Van Buren, p. 108, no. 8, fig. 107; Hiller von Gärtringen and H. Lattmann, *Arkadische Forschungen*, pp. 35–36, figs. 9, 11) are also antefixes because of their small size. The examples most distant from Sparta are acroteria from the temple of Aphrodite at Aegina (Furtwängler, *Aegina*, p. 486, fig. 403; Wolters, *Gnomon*, 1925, pp. 46–48; Rhomaïos, 'Εφ. 1933, p. 7, n. 1; Welter, *JdI*. 1938, A.A. 19; Mrs. Van Buren and Weickert wrongly assign the fragments to two different acroteria, from the Aphaia and Aphrodite temples respectively) and our acroteria from the Heraeum and the related antefixes of the Bouleuterion at Olympia (Koch, *RM*. 1915, pp. 48, 49). More or less complete lists are given by Van Buren (*op. cit.* pp. 179–183), and Rhomaïos ('Εφ. 1933, p. 19, n. 2).

<sup>60</sup> *Olympia* ii, p. 168, pl. xcvi. 1–5; *Artemis Orthia*, pp. 126–127.

<sup>61</sup> The Spartan origin of such disc acroteria is supported by Woodward (*BSA*. xxvii, 1925–26, p. 201; xxviii, 1926–27, p. 42; *Artemis Orthia*, pp. 117–120, 126–129), partly on account of the great number found at Sparta, and partly because of the peculiarly Laconian ("Cyrenaic") pomegranate designs. He is followed by Mrs. Van Buren (*op. cit.* pp. 18, 19), Weickert (*op. cit.* pp. 29, 30), Buschor (*AM*. 1927, p. 211 and *Tondächer*, p. 3), Rhomaïos (*Gnomon*, 1931, p. 651 and 1933, pp. 19–25), and Payne (*Necrocorinthia*, p. 249, n. 1). The example first known, from the Heraeum at Olympia, is regarded as Protocorinthian by Karo (*JdI*. 1908, A.A. 128) and Dörpfeld (*Alt-Olympia*, pp. 210, 390). Weickert (*Typen*, p. 40) suggests that all are Protocorinthian imitations. Furtwängler (*Sb. Mün. Akad.* 1906, pp. 474–476 and Koch, *RM*. 1915, pp. 112–114) regard them as transitional between Protocorinthian and Corinthian, Wolters (Springer, *Kunstgesch.* i<sup>11</sup>, p. 164) even as early Corinthian. Koch had suggested Sicyon as the place of origin for the entire group; he is still (*Gnomon*, 1927, p. 405) doubtful of the Laconian origin (cf. Volkert, *Das Akroter in der antiken Baukunst*, p. 9). But, in addition to other proofs of Spartan origin (analogies to Laconian pottery and the great number found at Sparta) we must include the actual representation of such disc acroteria on Laconian pottery, as on the gable of a roof on a kylix in the Louvre (*AZ*. 1881, pl. 12, 2; *RA*. 1907<sup>2</sup>, p. 48 n. 4; *CVA*. Louvre, III De, pl. 3, 12), and a man apparently represented as erecting such a disc acroterion on a temple on a fragmentary kylix at Cassel from Samos (Böhlaus, *Aus ionischen und ital. Nekropolen*, p. 128, pl. x, 4; *JdI*. 1907, p. 10; *RA*. 1907<sup>2</sup>, p. 49, n. 14; *JHS*. 1932, p. 40; *BSA*. xxxiv, 1933–34, p. 166). We may also note the later imitations of these disc acroteria, generally with Laconian relationships, such as the shield of 457 B.C. dedicated by the Spartans



The front of the disc is richly decorated both with molded and with painted design (fig. 4). In the center of the disc is an air vent; working from this point outward, the patterns are as follows:

- 1) a triple molded torus, painted black;
- 2) step pattern, painted alternately purple, black and white;
- 3) a band of spiral hooks to the left, alternately purple and black on a white ground;



FIG. 4.—DISK ACROTERION OF THE HERAEUM

- 4) a wide band of molded tongues, painted alternately purple and black and edged with a narrow line of white; in each spandrel, a white dot;
- 5) a triple molded torus, painted black;
- 6) a narrow band of painted tongues, alternately purple and black and edged with a white line;

on the apex of the temple of Zeus at Olympia (Pausanias v, 10, 4)—compare that on the apex of the Megarian Treasury (Paus. vi, 19, 3)—and the two late marble disc acroteria on the temples at Kourno in Laconia (Le Bas, *Voyage arch. Peloponnèse* ii, pls. 1-11; Benndorf, *JOAI*. 1899, pp. 12-13, figs. 11-14), and also the very numerous late marble acroteria cut to fit gable apices at Sparta itself, either purely circular (*AM*. 1877, p. 317; *AZ*. 1881, pl. 17, 1; *JOAI*. 1899, p. 10, fig. 8; Wace and Tod, *Sparta Museum*, p. 198, nos. 653-654) or enframed with rinceaux (Wace and Tod, *op. cit.* pp. 140, 153, 162, 206, 209, nos. 39a, 139-141, 299, 734-735, 759<sup>18</sup>—interpreted as “pilaster-capitals?”; Möbius, *Ornamente gr. Grabstelen*, pp. 76, 78, pl. 71a-c—purpose undecided); there are others at Mistra (Wace, *op. cit.* p. 140). In the light of this continuous tradition from early archaic to late Roman times at Sparta, we cannot doubt the Laconian origin of the type.



- 7) a triple molded torus, painted black;
- 8) three rows of scale pattern: (a) black with white outline; (b) purple with white outline; (c) black with purple outline;
- 9) small torus with zigzag painted on it in white;
- 10) narrow band of tongues, painted alternately purple and black and edged with white;
- 11) small torus with zigzag painted on it in white;
- 12) black dentellated border.

Of these patterns, the step pattern (2) and the spiral hook (3) are the most important for dating. The step pattern appears first and most frequently on Laconian

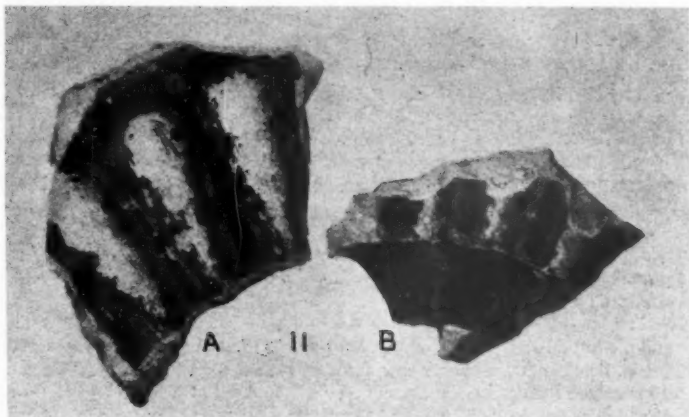


FIG. 5.—FRAGMENTS OF ACROTERION FROM PRECINCT OF ARTEMIS ORTHIA

II pottery which Lane dates ca. 630–590 B.C.<sup>62</sup> The spiral hook is an orientaling pattern which is very common on Proto-Attic and Protocorinthian wares. In Proto-Attic it is still present, as a comparatively minor auxiliary ornament, on the Nessos amphora at the end of the seventh century. It does not seem to occur on Early Corinthian vases. In Laconian ware the pattern is rarely found, but it does appear on a Laconian III plate from the Menelaion<sup>63</sup> which Lane dates ca. 575 B.C.<sup>64</sup> On this plate the hook spiral is very much stylized, but the fact that it was still in use in 575 B.C., even in this degenerate form, makes its appearance on an acroterion dated in the early sixth century quite possible.

Finally, two fragments of a disc acroterion (fig. 5) which duplicate almost exactly two patterns, (3) and (4), on the disc from Olympia have been found in the sanctuary

<sup>62</sup> *BSA*, xxxiv, 1933–34, pp. 122 and 181. The lower limit is set by Lane at 590 B.C. because some examples of Laconian II pottery were found with Middle Corinthian vases in graves in Taranto. Three of the vases found with Laconian II pottery in grave 285 are published in Quagliati, *R. Museo Nazionale di Taranto*, 51. They are quite clearly Middle Corinthian; Payne (*Necrocorinthia*, p. 308, nos. 937–40) also classifies them as such. Payne allows a margin of ten years, 600–590 B.C., as the time of transition from Early to Middle Corinthian style. Lane's lower date for Laconian II thus agrees well enough with Payne and, if anything, is a little early.

<sup>63</sup> *Artemis Orthia*, pl. xvii.

<sup>64</sup> *BSA*, xxxiv, 1933–34, p. 146.



of Artemis Orthia.<sup>65</sup> These fragments have a narrow band of hook spiral to the left, surmounted by a wide band of molded tongues, painted alternately purple and black and outlined in white, and with a white dot in each spandrel. The only point in which these patterns differ from those on the Olympia disc is in the color scheme of the narrow band of spiral hooks. On the fragments from Sparta, the spiral hooks are purple with white centers and are painted on a dark ground; on the acroterion from the Heraeum, they are alternately purple and black and are painted on a white ground.

The fragments from the sanctuary of Artemis Orthia were found below the layer of sand with Laconian II and III pottery.<sup>66</sup> The sand deposit was dated about 600 B.C. by Dawkins. This date, however, depended on the chronology of the pottery, of which the latest found below the sand was classified by Droop as Laconian II,<sup>67</sup> for which Dawkins set a lower limit of 600 B.C.<sup>68</sup> But Lane has shown conclusively that a lakaina and a goblet found below the layer of sand are very early Laconian III.<sup>69</sup> He dates the lakaina ca. 590–585 B.C. The deposit of sand must have been laid, therefore, early in the Laconian III period, no earlier than 590 B.C. and probably as late as 580 B.C., since the lakaina is dated 590–585 B.C. and was probably not destroyed immediately upon being made.<sup>70</sup>

The date *ante quem* for the Artemis Orthia fragments of a disc acroterion is, there-

<sup>65</sup> *Artemis Orthia*, p. 136, no. 11 and p. 119, fig. 87.

<sup>66</sup> *Ibid.* p. 136, no. 11; *BSA.* xxxiv, 1933–34, pp. 134–35.

<sup>67</sup> *Artemis Orthia*, pp. 72–80.

<sup>68</sup> *Ibid.* pp. 16–17.

<sup>69</sup> *Ibid.* p. 76 and pls. VII and VIII, and p. 82, fig. 55. For Lane's dating of these vases, see *BSA.* xxxiv, 1933–34, pp. 134–135. Briefly summarized, his grounds for classifying the lakaina as Laconian III are as follows: 1) floral ornament makes its first appearance in the form of a lotus bud chain and a handle palmette, both of which are common Laconian III patterns, but do not appear in Laconian II; 2) the slender figures are comparable to those on cups by the Hephaistos painter (Laconian III); 3) the warriors are similar to those on Middle Corinthian vases belonging to the "Gorgoneion" and "Samos" groups (cf. Payne, *op. cit.* pl. 32, 1–3 and pl. 33, 11); 4) the plastic heads at the base of the handles are contemporary with Middle Corinthian heads (cf. Payne, *op. cit.* pl. 48, 2, 3.); 5) a four-winged figure like the one on the lakaina would be a rarity on a seventh century vase of any fabric. Payne (*op. cit.* p. 306, no. 882) dates the Middle Corinthian vase on which appear the heads with which Lane compares those on the lakaina, 590–580 B.C. Even Droop was not too happy about placing these pieces in the Laconian II period. He says of the lakaina: "The absolute fact that it was destroyed with the destruction of the earlier temple leads us for convenience's sake to class it with the second period, but that it is later than the mass of ware which we call Laconian II is shown by the palmette and the lotus pattern, of which this is positively the first appearance, though in the case of the former the honour is shared by another sherd found in the same deposit" (*Artemis Orthia*, p. 76).

<sup>70</sup> Lane (*BSA.* xxxiv, 1933–34, pp. 135, 137, 172, 180) cites evidence for placing the Hephaistos painter group (with which he places the lakaina) "in the few years preceding the destruction of the old temple," and would date the group ca. 600–575 B.C., contemporary with Middle Corinthian. The earliest sherds found above the sand are apparently to be dated near the end of the Middle Corinthian period, ca. 580–575 B.C. (*loc. cit.* pp. 137–139). Droop (*JHS.* 1932, p. 303), who had formerly agreed with Dawkins in dating the sand stratum and the beginning of Laconian III at 600 B.C., has suggested a still earlier date, 610 B.C. and would shorten the period of Laconian III pottery to twenty-five or thirty years. But he was trying to adjust his dating to Ure's suggestion that Attic "Droop cups" were already imitating Laconian IV and V cups in 560 B.C. Such relationships are difficult to establish at best and are certainly not as sound evidence for dating as the grave finds in Taranto which form the basis of Lane's chronology. Lane is probably correct in saying that "if there is any connexion between the Droop-cup and the Laconian IV kylix, the latter and not the former is the derivative" (*BSA.* xxxiv, 1933–34, p. 152).



fore, ca. 580 B.C. instead of 600 B.C.<sup>71</sup> The acroterion from the Heraeum is not only similar to this one but, as we have seen, has patterns that can be duplicated on Laconian II pottery, dated 630–590 B.C. The acroterion cannot be earlier than 600 B.C. because that is the date of the Early Corinthian alabastron buried in the foundations of the temple. It would seem likely that this type of painted terracotta disc acroterion was popular in the early sixth century and that one was ordered for the new temple of Hera whose foundations would seem to have been laid about 590 B.C.<sup>72</sup>

Thus all the ceramic evidence, both that from the earth strata below and that from the roof above, concurs with the internal evidence of the architectural design in pointing to the beginning of the sixth century as the date of the erection of the temple. For, had it not been for the erroneous tradition of the foundation in 1096 B.C. cited by Pausanias, coupled with a seemingly plausible interpretation of the meaning of the original wooden columns, no impartial observer of the present day would have attempted to date the temple earlier than the sixth century. The excellent workmanship of the wall orthostates, and the presence of developed angle contraction in the peristyle—even in the wooden form which preceded that of stone—would preclude an earlier date. We do not, unfortunately, know whether the angle intercolumniations in the “Gorgon temple” at Corfu were narrower than the others, so that our earliest actual evidence for angle contraction on the Greek mainland dates from about 540 B.C. (in the temple of Apollo at Corinth), and the earliest experiments in the western colonies date from about 510 and 500 B.C. (in the temples of Zeus Olympius and Heracles at Acragas). A half century earlier than the temple at Corinth is probably as far as we should be justified in going with respect to a mainland temple exhibiting well developed contraction, with the normal axial spacings averaging 3.56 m. (10 11/12 Doric feet) on the fronts and 3.26 m. (10 Doric feet) on the flanks, contracted at the corners by 0.235 m. and 0.14 m., respectively. Such a date as about 590 B.C. would agree, also, with the style of the earliest extant stone columns of the temple.<sup>73</sup> Far from assuming, therefore, that the wooden peristyle was erected at a date so long before the beginning of the sixth century that some of the oak columns had rotted and been replaced by that time—while other oak columns in the same temple survived seven or eight centuries longer—we may conclude that wood columns were employed originally in a spirit of economy, with the idea that they should be replaced by stone as soon as individuals or states advanced the necessary funds. Indeed, the unparalleled insertion of so many votive tablets in the shafts of

<sup>71</sup> It may be noted that Lane dates the kylix showing a figure carrying such an acroterion to the top of a building “fairly early in Laconian III” (590–550 B.C.), and suggests that the scene may represent an event which was actually taking place in Sparta, the erection of the new temple of Artemis Orthia (*BSA*, xxxiv, 1933–34, p. 166).

<sup>72</sup> It is hardly necessary to discuss the suggestion that the acroterion is older than the present Heraeum, having been made for Heraeum II and subsequently raised to a final position on Heraeum III (Dörpfeld, *AM*, 1922, pp. 34–35; Buschor, *AM*, 1922, p. 50; Weickert, *Typen*, pp. 36, 40); see above, p. 63. Dörpfeld now believes that the acroterion was made for Heraeum III (*Alt-Olympia*, p. 172), and argues that Heraeum II was never erected to so high a level. We have concluded that Heraeum II never existed in any form, not even as an idea.

<sup>73</sup> The possibility that some of the stone columns may date from the erection of the temple is suggested also by Vacano, *op. cit.* p. 48.



these very columns (see fig. 1) may have been inspired by the presence of inlaid dedicatory inscriptions containing the names of contributors.

\* \* \* \* \*

Another piece of evidence which should be considered in this connection is the relic of one of the two cult statues within the temple, that is, the limestone head of Hera (fig. 6), assuming that it has been rightly identified. Recently, to be sure, efforts have been made to show that this "Hera" head did not belong to a cult statue at all, but was part of a sphinx, either in relief as part of an altar or pedimental composition (analogous to the Gorgon at Corfu),<sup>74</sup> or in the round as the crowning feature of a pedestal or column (like the Naxian Column at Delphi).<sup>75</sup> But the only building at Olympia, at this early date, of sufficient size to be considered with respect to such a pediment would be the Heraeum itself; and this, though large enough,<sup>76</sup> is to be excluded because a huge stone tympanum would hardly have been supported on wooden columns and an entablature of wood and terracotta. There is, furthermore, little probability that the face of "Hera" could have split off so cleanly from a relief. As for the alternative explanation that the hypothetical sphinx was in the round, the chief evidence in its favor would be the protuberance above the left ear, and the protruding form of the left ear itself together with the related asymmetry of the face. The protuberance would be explained as a strut or attachment of the wings (which would be, therefore, to the right of the head which was turned to look directly forward), and the protruding ear, by the more relief-like quality of this side of the face where body and wings were in immediate juxtaposition. But the earlier interpretation, that these peculiarities were due to the veil of Hera, would seem to be equally valid. Certainly the objection from the viewpoint of asymmetry should not be raised against the identification as Hera. For the size and proportions of the pedestal, 4.10 m. wide but only 1.40 m. deep, are such as to show that the enthroned Hera was not, as is usually assumed, facing directly forward.<sup>77</sup> Instead, she must have been seated in profile (like the Zeus in the "Introduction pediment" of Athens), facing toward the spectator's right but with her head turned toward the spectator (like the seated male figure in one of the Spartan tombstones), either directly forward at right angles to the throne (fig. 6b) or possibly turned at about forty-five degrees (fig. 6a; <sup>78</sup> compare the Zeus of the Corfu pediment and the "Blue-beard"

<sup>74</sup> Vacano, *op. cit.* pp. 8-20. <sup>75</sup> Hill (D.K.), "Hera, the Sphinx?" *Hesperia* xiii, 1944, pp. 353-360.

<sup>76</sup> The height of the head of Hera to the top of the "polos" is 0.52 m., and so would probably be about 0.50 m. to the top of the skull, which is exactly the corresponding measurement from the chin to the top of the skull of the Naxian Sphinx. Restored as a Sphinx, therefore, the height at Olympia would have been about the same as at Delphi, 2.22 m. from plinth to top of head, 2.32 m. from plinth to top of wings. As the distance between the centers of the angle columns in the Heraeum (17.33 m.) is about five-sixths of that in the "Gorgon temple" at Corfu, so a central Sphinx in its pediment could have had a height in similar proportion to that of the Gorgon of Corfu (2.79 m.), that is, about 2.32 m.

<sup>77</sup> Dörpfeld assumes that the statue pedestal with the above dimensions must be a late alteration, and that, in order to support the throne facing forward, the pedestal must originally have occupied also the gap of 1.50 m. between it and the rear wall, giving a total depth of 2.90 m. (*Olympia, Ergebnisse* ii, pp. 33-34; iii, pp. 2-3; *Alt-Olympia*, p. 184). But there is no evidence whatsoever for such an assumption, beyond the preconception as to the attitude of the statue.

<sup>78</sup> A view of the head from this—possibly the most important—direction seems never to have been published, and is here supplied, through Miss Richter's kindness, from the cast in the Metropolitan Museum of Art.





FIG. 6. — HEAD OF HERA. (a) THREE-QUARTER VIEW AS PRESUMABLY SEEN BY SPECTATOR, AND (b) IN FULL FACE



heads of the Hecatompedon pediment at Athens), in either case pulling her veil forward with the left hand and thus accounting for the asymmetry and the position of her left ear. To the right, before her, stood Zeus. The shape and material of the pedestal agree exactly with the attitude and material of the head.

It has been argued, however, that the Hera should not have been of this material at all, but rather of gold-and-ivory. This final objection to the long-accepted identification of the head is more subjective, and depends upon the reading of the text of Pausanias. In describing the monuments to be seen within the Heraeum, Pausanias first mentions that there is a statue of Zeus which stands beside a seated figure of Hera.<sup>79</sup> He does not name the sculptor of these cult statues nor does he tell us the material of which they are made; he simply dismisses them with the phrase, ἔργα δέ ἐστιν ἀπλᾶ—“but they are plain works of art.”<sup>80</sup> He then lists a number of other statues, in each case giving the name of the sculptor, and any facts of interest about him, such as his family connections, teachers, and race. If he has not been able to learn the name of the artist, he carefully says so.<sup>81</sup> At the end of his discussion of this group, he says, τὰ μὲν δὴ κατελεγμένα ἐστὶν ἐλέφαντος καὶ χρυσοῦ, χρόνῳ δέ ὕστερον καὶ ἄλλα ἀνέθεσαν ἐς τὸ Ἡραῖον, and then mentions the Hermes of Praxiteles, which he says was made of stone, a bronze Aphrodite by Kleon, a statue of a child, inlaid with gold, by Boëthos, and two other works in gold-and-ivory which had formerly been in the Philippeion. It has been argued<sup>82</sup> that the phrase τὰ κατελεγμένα ἐστὶν ἐλέφαντος καὶ χρυσοῦ (the statues that have been enumerated are of ivory and gold) applies to the Hera and Zeus, as well as to the group of which he has just given a detailed account. But the Hera and Zeus are isolated from the other statues both by the phrase ἔργα δέ ἐστιν ἀπλᾶ and by Pausanias' comparative lack of interest in them. If we translate the word ἀπλᾶ as *simple, plain* (see note 80), we see at once that Pausanias is contrasting these plain, limestone, cult images with the more elaborate, ornate statues in gold-and-ivory which immediately caught his eye and attention when he entered the temple. He therefore hastily noted the existence of the cult images and their attitudes, dismissed them as plain works of art, and turned to what interested him more: the gold-and-ivory statues, the Hermes of Praxiteles, the Aphrodite of Kleon, the statue of a boy by Boëthos. The reason for mentioning the materials of the last three statues is that they follow and precede groups of gold-and-ivory works and must, therefore, be distinguished from them.

<sup>79</sup> Pausanias v, 17, 1-4.

<sup>80</sup> Frazer (i, p. 262) translates ἀπλᾶ in this passage as “rude,” Jones (Loeb ed. ii, p. 477) renders it as “crude,” but these seem to be unjustified distortions of the clear meaning of the word: ἀπλοῦς as the opposite of διπλοῦς meant *single*, and from this original sense were derived such meanings as *simple, plain, open, frank, simple* as opposed to *compound* or *mixed*, and, of precious metals, *pure, unalloyed*. None of these meanings implies crudeness or rudeness. Possibly the discovery of the limestone head led Frazer and Jones to believe that Pausanias was here using the term ἀπλᾶ as equivalent to ἀρχαία, but a few lines further on Pausanias says of the images of Leto, Tyche, Dionysos and a winged Nike, all made of gold-and-ivory, τοὺς δὲ εἰργασμένους αὐτὰ οὐκ ἔχω δηλῶσαι, φαίνεται δὲ εἶναι μοι καὶ ταῦτα ἐς τὰ μάλιστα ἀρχαία. The contrast between the cult images and the group of statues that follows is not, therefore, one of archaic workmanship and style. We shall see, moreover, that the ordinary meaning of ἀπλᾶ is perfectly suitable in this passage.

<sup>81</sup> *Ibid.* 17-19.

<sup>82</sup> Vacano, *op. cit.* p. 11; Hill, *op. cit.* pp. 353 ff.

<sup>83</sup> Payne, *op. cit.* p. 235, pl. 47, 12-13; a better reproduction of the plastic head is to be found in *CVA. Louvre*, fasc. 8, III Ca, pl. 11, fig. 2.



This practice of treating things of little or no interest to him in a cursory manner is a familiar habit of Pausanias.

The text of Pausanias, then, seems to indicate that the Hera and Zeus were not made of gold-and-ivory. The descriptive adjective ἀπλᾶ could hardly be applied to large, chryselephantine statues, no matter how archaic the workmanship. The literary evidence and the material, shape, and size of the pedestal support the traditional identification of the limestone head as belonging to the seated figure of Hera. In the absence of more conclusive evidence to the contrary, we prefer, therefore, to continue to regard the head as a part of the cult statue group, so that we must examine it as possible corroborative evidence for the date we have assigned to the temple.

Payne associated the Hera with plastic heads appearing on early Middle Corinthian vases dated about 600 B.C.<sup>83</sup> But the face of Payne's no. 880, which he considers closest to the Hera head, has large bulgy eyes and a wide mouth with thick, pouting lips. The side hair is done in the "layer-wig" style and conveniently covers the ears. Hera is thin-lipped, and the upper lip is carved quite differently from the lower. Her eyes are set back under the brows and are carved in a different plane from the forehead and cheeks. Hera is looking down and the upper lid is adjusted accordingly, as is also the slant of the eyeball. The artist has attempted a naturalistic ear and has experimented with the hair across the forehead, putting in a central parting and stylizing the hair in curious scallops which, as we shall see, will reappear on later heads.<sup>84</sup> The eyes, mouth, ear, and hair make the Hera the later of these two heads. No. 880 was pulled down to "the early sixth century" by Payne when he saw the painted decoration on the pyxis after it had been cleaned.<sup>85</sup>

A much closer parallel to the Hera head is to be found, however, in the terracotta sphinx head from Calydon (fig. 7) which Payne places "within the first quarter of the sixth century—probably between 590 and 580 B.C."<sup>86</sup> In this head we have the same broad, bony structure in the face. The eyes are similar to Hera's, although they bulge a little more and are larger in proportion to the face. The mouth is like Hera's in being thinly drawn, but Hera's lower lip is a little fuller and curves more naturally. The most striking likeness is provided in the ears, which stick out prominently from the head, with the hair bushing out behind them in much the same manner as Hera's must have done; Hera's ear, however, is placed lower and has the planes more clearly indicated. In both heads, the forehead hair rises to a central parting, but in the case of the Hera the hair is stylized in a later manner. If the Calydon head is to be dated 590–580 B.C., surely the Hera head cannot be earlier than 580 B.C.<sup>87</sup>

But clay and stone are very different media and we should look for possible comparisons with other pieces of monumental sculpture in the archaic period. The Hera head is certainly later than any of the kouroi in Miss Richter's New York-Sounion group.<sup>88</sup> Of the kouroi in this group, the head of Kleobis is perhaps nearest

<sup>83</sup> See below, pp. 78, 80.

<sup>84</sup> Payne, *op. cit.* p. 235, n. 1.

<sup>85</sup> *Ibid.* pp. 235, 239.

<sup>87</sup> Miss Richter (*Sculpture and Sculptors of the Greeks*, pp. 35–36) saw that these two heads belonged close together chronologically and placed them both at ca. 600 B.C., a date which she adopted because the Heraeum has generally been dated at the end of the seventh century.

<sup>88</sup> Richter, *Kouroi*, pp. 47 ff.



to the Hera and he is to be placed late in the first group. In both heads we have broad, firm contours and a squarish chin, but Kleobis' face is broader in proportion to its length; on both the eyebrows are indicated, on the Kleobis by a carved ridge, on the Hera by a lower ridge and a delicately incised line;<sup>89</sup> and on both heads the hair bushed out from behind the ears. But here the similarity ends and in several important points of structural detail the Hera is later. Hera's ear is placed at approximately the right level and it is far less stylized; there is not a trace of the volute pattern of which a suggestion is still present in the ear of the Kleobis and, although certainly not perfect in anatomical detail, it is carved in more than one plane, the shell is fairly well done, and the tragus is indicated by a protrusion from the cheek. In other words, patternization has been abandoned for a conscious attempt at naturalism.

The eyes of the Hera have much more depth than those of the Kleobis or, indeed, of any of the kouroi dated 615–590 B.C. by Miss Richter. As we have seen, the eyeballs are no longer carved in the same plane with the brows and cheeks, and the slant of the eyeball and slightly drooping upper lid effectively portray a downcast eye; the upper lid, moreover, appears to project a little beyond the lower. The artist has created an eye that is much better than the large, full, bulging eyes of the earlier kouroi which stare straight ahead. It is not until we reach the Tenea-Volomandra group (ca. 575–550 B.C.) that we can find an eye that even approximates Hera's in naturalness. The kouroi of the Orchomenos-Thera group have the old wide-open, bulging eye carved in the same plane with the cheeks and brow.<sup>90</sup> The Volomandra kouros, no. 51, represents a stage beyond the Hera: his eyes, like Hera's, are looking down; they are bulgy, but the upper lid is quite clearly carved in a different plane from the lower and tear ducts are present.<sup>91</sup> The eyes of some of the kouroi in this group, however, are not so far advanced, for example those of nos. 52 and 53.<sup>92</sup>

The treatment of the forehead locks also points to a date later than 590 B.C. The hair rises from the sides to a central parting, making a hair line quite unlike the straight or curved one of the kouroi of Miss Richter's first two groups. The central parting appears on kouroi after 575 B.C.,<sup>93</sup> and on small clay heads attached to Corinthian vases, after 590 B.C.<sup>94</sup> But most interesting for dating is the stylization of the locks into oddly shaped scallops or tongues with interior grooves. This treatment of the hair, stylized though it is, gives a much softer, more natural effect than the beads, snail locks, and rosettes of the early kouroi. Over the ears the pattern straightens out into softer waves. These curious scallops, rather like an exaggerated, stiffly set, marcel wave, anticipate and are an earlier version of the hair of the

<sup>89</sup> Miss Mary H. Swindler has kindly called my attention to a discussion of the Hera head by Hans-jörg Bloesch in a book that has only recently reached this country. He suggests (*Antike Kunst in der Schweiz*, pp. 34–35) that this treatment of the eyebrow by means of a low ridge accentuated by an incised line is Laconian (cf. *ibid.*, pl. 4, a more archaic head which anticipates the treatment of the brows on the Hera head). The polos, too, is, in his opinion, Laconian in style (cf. *idem.*; also *Artemis Orthia*, pls. 32, 2; 92, 99, 1; 109). This suggestion of a Laconian origin for the Hera is interesting in view of the fact that the acroterion and roof tiles on the Heraeum were probably Spartan imports (see pp. 69–73 above) [H. E. S.]

<sup>90</sup> Cf. Richter, *Kouroi*, pls. xxviii, xxix, xxxii, xxxvi and xxviii.

<sup>91</sup> *Ibid.* pl. xlv.

<sup>92</sup> *Ibid.* pls. xlvi and xlvii.

<sup>93</sup> *Ibid.* e.g. no. 53, p. 130 and pl. xlvi.

<sup>94</sup> Payne, *op. cit.* pls. 47, 48 and p. 235.





FIG. 8.—HEAD OF NIKE FROM DELOS



FIG. 7.—HEAD OF SPHINX FROM CALYDON



Winged Nike from Delos (fig. 8), where the same pattern is found with the addition of spiral curls in the middle of the forehead below the central parting. The Nike is dated ca. 560–50 by Miss Richter.<sup>95</sup> This style of hair occurs again on a later statuette, Kore 675 from the Acropolis, dated ca. 530 B.C.<sup>96</sup> and in various modified, and often more elaborate, versions on later korai dated to the end of the century.<sup>97</sup> The hair on the Hera is thus the first example of a style that was to persist throughout the sixth century.<sup>98</sup>

The long face and the archaic effect of the head as a whole should not be allowed to outweigh other evidence in dating the Hera head.<sup>99</sup> The side planes of the face merge much more naturally with the front plane than they do, for example, in the Dipylon head.<sup>100</sup> Certainly the eyes, hair, and ear of the Hera head cannot be duplicated in any seventh century statue; rather they anticipate styles and forms that are common after 575 B.C. The modelling of the eye and mouth is much better than that of the Berlin goddess<sup>101</sup> (ca. 580 B.C.). The Volomandra kouros, on the other hand, is, as we have seen, more advanced than the Hera in the handling of the planes of the eyelids and in the clear indication of the tear duct. The Hera is, therefore, earlier than the Volomandra kouros, but not much earlier if the Berlin goddess is correctly dated at ca. 580 B.C. A date no earlier than 580 B.C. seems about right for the Hera. This would put her a little later than Kleobis (ca. 590 B.C.), the Calydon sphinx head (ca. 590–580 B.C.) and the Berlin goddess (ca. 580 B.C.) and somewhat earlier than the Nike from Delos (ca. 570–550 B.C.) and the Volomandra kouros (ca. 560–550 B.C.).

The Hera head, therefore, dated on stylistic grounds and without reference to the architectural evidence, supports our view that the Heraeum belongs to the early sixth century. Conversely, the very fact that the date appropriate for this head, so suitable also in material, size, and attitude, is exactly that required by the temple itself, forms additional corroboration of the identification as the head of Hera.<sup>102</sup>

COLUMBIA UNIVERSITY

HELEN E. SEARLS  
WILLIAM B. DINSMOOR

<sup>95</sup> Richter, *Sculpture and Sculptors of the Greeks*, p. 62.

<sup>96</sup> Payne, *Archaic Marble Sculpture from the Acropolis*, pp. 26–27, pl. 50, 1–3.

<sup>97</sup> *Ibid.* e.g. nos. 659, 693, 670, all dated ca. 500 B.C.

<sup>98</sup> In Sicily it is found in the fifth century on a Demareteion dated ca. 479–478 B.C. (Richter, *Sculpture and Sculptors of the Greeks*, fig. 160). On this coin the shape of the scallops duplicates exactly those on the Hera head.

<sup>99</sup> It may be noted that the face appears to best advantage and less archaic when seen in three-quarter view, and it was possibly from this angle that the artist expected the head to be seen. Cf. pp. 74–76 above.

<sup>100</sup> Richter, *Kouroi*, pl. xiv. The photograph, however, does not clearly show the awkward juncture of the planes. Cf. also pl. XLVII, fig. 172, the side view of Acropolis head 617, which belongs in the Tenea-Volomandra group, dated ca. 575–550 B.C.

<sup>101</sup> Richter, *Sculpture and Sculptors of the Greeks*, figs. 139 and 140, where she is shown on the same page with the Hera head.

<sup>102</sup> The head was actually found in 1878 (rather than 1870 as stated by Miss Hill, *op. cit.* pp. 353, 355), and, though at some distance from the temple, in the very locality in which lay immured the other fragments attributed with less certainty to the statue, and also the fragments of the great terracotta acroterion of the Heraeum itself (*Olympia, Ergebnisse* iii, pp. 2, 5).



## ARCHAEOLOGICAL NEWS AND DISCUSSIONS

### NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

STEPHEN B. LUCE, *Editor-in-Charge*

Fogg Museum of Art, Harvard University, Cambridge, Mass.

#### ADVISORY BOARD

- Egypt*—DOWS DUNHAM, Museum of Fine Arts, Boston  
*Orient, Western Asia*—WILLIAM F. ALBRIGHT, Johns Hopkins University  
*Far East*—BENJAMIN ROWLAND, Fogg Museum of Art, Harvard University  
*Greece, Prehistoric*—G. E. MYLONAS, Washington University, St. Louis  
*Greek and Roman Sculpture*—MARGARETE BIEBER, Columbia University  
*Painting and Vases*—GEORGE H. CHASE, Harvard University  
*Epigraphy*—BENJAMIN D. MERITT, Institute for Advanced Study  
*Architecture*—RICHARD STILLWELL, Princeton University  
*Rome, Architecture and Painting*—CLARK HOPKINS, University of Michigan  
*Slavic Archaeology*—CLARENCE A. MANNING, Columbia University  
*American Archaeology*—HERBERT F. SPINDEN, Brooklyn Museum  
*Mediaeval Art*—CHARLES R. MOREY, Princeton University  
*Bibliography, General*—DAVID M. ROBINSON, Johns Hopkins University

#### CONTRIBUTING EDITORS

##### *Classical Archaeology*—

- CEDRIC BOULTER, University of Cincinnati (Vases)  
AGNES BALDWIN BRETT, American Numismatic Society (Numismatics)  
JOHN L. CASKEY, University of Cincinnati (General)  
ROBERT E. DENGLE, Pennsylvania State College (General)  
STERLING DOW, Harvard University (Epigraphy)  
WILHELMINA VANINGEN ELARTH, Wheaton College (Vases)  
HAROLD N. FOWLER, Washington, D. C. (General)  
SARAH E. FREEMAN, Johns Hopkins University (Vases)  
HAZEL HANSEN, Stanford University (Prehistoric Greece)  
J. PENROSE HARLAND, University of North Carolina (Prehistoric Greece)  
P. L. MACKENDRICK, Phillips Andover Academy (Epigraphy)  
MARY ZELIA PEASE, Bryn Mawr, Pa. (Vases)  
LUCY T. SHOE, Mount Holyoke College (Architecture)  
H. R. W. SMITH, University of California (Vases)  
FRANCIS R. WALTON, Williams College (Epigraphy)  
SHIRLEY H. WEBER, Gennadius Library, Athens (Numismatics)

##### *Oriental Archaeology*—

- JOHN W. FLIGHT, Haverford College  
HENRY S. GEHMAN, Princeton Theological Seminary  
CYRUS H. GORDON, Princeton, N. J.  
FRED V. WINNETT, University of Toronto

##### *Roman Archaeology*—

- ELIZABETH C. EVANS, Wheaton College  
GEORGE M. A. HANFMANN, Harvard University (Etruscan)  
W. C. McDERMOTT, University of Pennsylvania  
ROBERT S. ROGERS, Duke University  
KENNETH SCOTT, Western Reserve University  
MERIWETHER STUART, Hunter College  
LOUIS C. WEST, Princeton, N. J.



- American Archaeology*—WENDELL BENNETT, American Museum of Natural History  
 GEORGE C. VAILLANT, University Museum, Phila.  
*U.S.S.R.*—HENRY FIELD, Field Museum of Natural History  
 EUGENE PROSTOV, Iowa State College  
*Christian*—FRANKLIN B. KRAUSS, Pennsylvania State College  
*Mediaeval and Renaissance*—EMERSON H. SWIFT, Columbia University  
 FRANCIS J. TSCHAN, Pennsylvania State University

### NECROLOGY

**Edward Charles Harwood.**—*The Masterkey* xviii, 1944, pp. 107–109 (portrait) prints an obituary of Edward Charles Harwood, Trustee of the Southwest Museum from 1935 until his death, and its President since 1943, who died in Pasadena, California, on April 24, 1944, in his seventy-second year. He was graduated from Stanford in its pioneer Class of 1895, having previously attended Pomona College, and pursued graduate studies at Columbia. He was one of the leading citizens of Southern California, particularly in Los Angeles and Pasadena.

**Philipp Lederer**, born in 1872 in Bamberg, Germany, died on September 2, 1944 in Lugano, Switzerland. He took his Ph.D. in 1910 at Munich with the thesis: *Die Tetradrachmenprägung in Segesta*. He travelled for several years. Since 1911 he had lived in Berlin as a respected numismatic scholar, collector and dealer. His last years he passed in Lugano. He has published many papers in *Deutsche Münzblätter*, *Schweizer numismatische Rundschau*, *Numismatic Chronicle*, *Numismatica e Scienze Affini* and other numismatic periodicals.

M. B.

**Henry Usher Hall** died on November 2, 1944, after a long illness, at the U. S. Naval Hospital in Philadelphia, at the age of sixty-eight. From 1915 to 1935 he was Curator of General Ethnology at the University Museum in Philadelphia, under the auspices of which he led several expeditions in the field, the latest being to Sierra Leone, West Africa, in 1937, two years after his retirement from active work at the Museum. Profoundly interested in prehistoric archaeology, he conducted excavations in the Dordogne in the summer of 1923, and in the same year was enrolled in the American School of Prehistoric Research. Under the auspices of the Museum, he also took special work in this field in London in 1933. In the First World War, he served for two years in the Army, most of which was spent overseas. During the last years of his life, he was a constant and faithful contributor to this Department of the JOURNAL. In 1921, he married Miss Frances Jones of New Orleans and

Philadelphia, who was a noted artist and sculptor, and greatly helped him in his work. She died in 1941, leaving no children. S. B. L.

**James Morton Paton.**—James Morton Paton died in Boston November 23, 1944. He was born in New York, May 12, 1863, the son of Thomas C. M. and Elizabeth L. Allen Paton. He received the degree of A.B. from New York University in 1883 and from Harvard University in 1884 and was a graduate student at Harvard from 1884 to 1887. He studied at Bonn in 1891–1892 and 1893–1894, receiving the degree of Ph.D. there in 1894. The year 1892–1893 he spent at the American School of Classical Studies at Athens.

He was professor of Latin and French at Middlebury College from 1887 to 1891, instructor in Greek at Wesleyan University from 1895 to 1898, and associate professor of Greek from 1898 to 1905. The year 1905–1906 he spent in Europe. He was managing editor of the *American Journal of Archaeology* in 1906–1907 and editor-in-chief from 1917 to 1920. For two years, 1908–1910, he was in Europe, then a year in Cambridge, again in Europe in 1911 to 1914, and in Cambridge from 1914 to 1920. In the latter year he went abroad, and for twenty years he lived in Paris with his sister, Miss Lucy A. Paton, during which period he spent considerable time in Greece and Italy. He made a brief visit to America in 1929 and again in 1936 to attend the celebration of the three hundredth anniversary of the foundation of Harvard College.

Paton's first published work was his doctoral dissertation entitled *De cultu Dioscurorum, pars prima* (Bonn, 1894). For Hayley's edition of the *Alcestis* of Euripides he wrote an excellent introduction on *The Myth of Alcestis in Ancient Art*. He was general editor of *The Erechtheum*, published in 1927 for the American School of Classical Studies at Athens, and wrote the chapter on the history of the Erechtheum. In his latest years his interest turned largely toward the later history of Athens. His little volume on *The Venetians in Athens, 1687–1688*, is one of the series of Gennadeion Monographs published for the American



School of Classical Studies at Athens. His other printed work consists of articles published for the most part in the *American Journal of Archaeology*.

Paton was a member of the Managing Committee of the School at Athens, the Archaeological Institute of America, the American Philological Association, the Society for the Promotion of Hellenic Studies, the Classical Association of New England, Phi Beta Kappa and Delta Phi, and corresponding member of the Numismatic and Antiquarian Society (of Philadelphia).

Paton was a most accurate and conscientious scholar, and his work always showed a firm grasp of his subject in its broad outlines and its minutest details. His industry was limited only by his physical condition. He was a loving brother, a faithful friend, and a genial companion. His sense of humor was unusually strong, and he appreciated the jokes of others no less than his own. He will be sorely missed.

H. N. F.

**Philip Ainsworth Means** was born in Boston, Mass., on April 3, 1892, and died in that city on November 24, 1944, at the age of fifty-two. He was graduated from Harvard in 1916, as of the Class of 1915, and took his A.M. from that University in 1917. During his Senior year at Harvard, he had the opportunity to take part in the Yale Peruvian expedition to Macchu Pichu, and that, combined with his anthropological studies, determined his future career. From 1916 to 1919 he was an Honorary Collaborator in Archaeology of the U. S. National Museum, under whose auspices he made further travels in Peru and Bolivia in 1917 and 1918. In 1919 and 1920 he was engaged in textile research in Peru, and in the latter year was appointed Director of the National Museum of Archaeology in Lima, retiring from that post in 1921, when he was appointed Associate in Anthropology at Harvard. In this capacity he travelled extensively in Europe and in Latin America. In 1927 he severed his connection with Harvard, and engaged in independent research for the rest of his life, continuing his travels in Europe and America. Of his very large bibliography of books, articles, and reviews, his best known are *Ancient Civilizations of the Andes* (1931), *Fall of the Inca Empire* (1932) and *The Incas: Empire Builders of the Andes* (1938). Of late years, he was working in mediaeval studies, and his last book, *Newport Tower* (1942), attempts to solve the problem of the much disputed origin of the so-called "Old Stone Mill" at Newport, R. I., one of the most baffling problems in the

continental United States—a book recently reviewed in this JOURNAL. Besides English, his bibliography includes many titles in Spanish, which he wrote with great ease and grace. In his profession, relatively young as he was, he lived to be regarded as one of the true pioneers in the systematic and scientific study of archaeology in Peru, and blazed the trail for a brilliant group of younger men who work in this field, and who received unselfish and constant encouragement from him. He was a most interesting and stimulating companion, and his letters, as well as his books, had a pronounced and highly individualistic style. His many friends and professional associates will miss his forthright, frank comments on men and affairs, while his exacting standards of conduct, and his meticulous integrity, will be remembered as outstanding in the ethics of our common profession. On April 18, 1934, he married Miss Louise Munroe, who survives. S. B. L.

**Erling C. Olsen** was killed in action in Northern France on July 28, 1944, just before he had completed his 31st year. His death deprives American scholarship of an outstanding champion of the younger generation in the field of the History of Ancient Art. The loss will be deplored by many of his friends among scholars in this country and abroad who regarded him as one of the greatest hopes of progress in knowledge in his chosen field.

Born in Chicago, Mr. Olsen was graduated from Harvard in 1935. He attended Princeton University from 1935 to 1937 (while doing additional graduate work at New York University) and received the degree of Master of Arts in 1937. In the summer of 1936, he held a Carnegie fellowship to the Institut d'art et d'archéologie in Paris. In 1937, he was awarded the Rome Fellowship of the American Academy in Rome. From 1937 to 1939 he travelled widely in Italy, Greece, North Africa and various European countries and acquired unusually early an extensive knowledge of monuments. In 1939 he was awarded the diploma by the American Academy in Rome.

His first article in the *American Journal of Archaeology* (1938) dealt with the frieze of the temple of Hephaistos in Athens, but he early developed his major interest in the history of Roman sculpture. A paper published in the *Memoirs of the American Academy in Rome* (1938) deals with Republican portraiture. While in Rome, he began to prepare an extensive publication of the Arch of Septimius Severus and in the very preliminary stages established himself as an authority



on that dark and crucial period of late antique art. In 1940 he collaborated in the writing of a monograph on "Dionysiac Sarcophagi in Baltimore" (published in 1942), to which he contributed a brilliant stylistic analysis of his own which will remain basic for further discussion of Roman relief sculpture from Hadrian through the Antonines.

Deeply conscious of the dangers of Fascism and Nazism and profoundly devoted to his country, in the Fall of 1939 he joined the National Guard to be prepared for what he knew was inevitable, and was mobilized in 1941. He served in the Infantry Intelligence Service first in this country and after early 1944, overseas.

Mr. Olsen was a gentle, sensitive and refined young scholar with unusually broad cultural interests. He was full of zest and sparkling with humor. To him, scholarly work was not a pleasant pastime in an ivory tower or one of various ways of making a career and a living. His early volunteering for military duty was connected with his awareness of imminent danger to the entire structure of modern civilization of which his enthusiastically elected work was only a particle. It is typical of his vital approach that in spare hours in the army he studied Roman battle sarcophagi and discovered on these monuments a vitalization of that classical theme owing to the terrifying experiences of the reality of war (1943).

Most of his work, so full of promise, remains unfinished. His memory will remain alive with us.

KARL LEHMANN

### GENERAL AND MISCELLANEOUS

**Spearheads and Mastodons.**—Under this title, M. R. H(ARRINGTON) publishes in *The Masterkey* xviii, 1944, pp. 120–121 (fig.) a stone spearhead, found in a gravel pit near Reed Springs, Missouri, in a deposit with teeth and bones of a mastodon. This discovery tends to confirm the frequently questioned discovery, made more than a century ago, of a similar deposit, also in Missouri, by Albert Koch. No date is assigned to the spearhead, but its excessive patination points to a very extreme age. It is now in the Southwest Museum.

**The Rôle of the Temple.**—An attempt to suggest the rôle of the temple in Egyptian and Mesopotamian society is made by HAROLD H. NELSON and A. LEO OPPENHEIM in *Bibl. Archaeologist* vii, 1944, pp. 41–63. The evolution of the temple in both areas is traced from its beginning as a simple housing for the statue of the god to the elaborate

structures of the imperial period. One result of the increased size and complexity of the later structure was that the worshiper was more cut off from his god; he could only dimly behold from a distance the brilliantly arrayed statue in the gloom of the holy of holies. While this may have increased his awe of the divine, it must have tended to retard the development of a sense of personal relationship to the deity. "The same chasm gaped between the temple and the worshiper as between the king's palace and the mass of loyal subjects." On the other hand, in the case of Assyria where the temple was originally arranged to give the worshiper more immediate access to the god, it can scarcely be argued that the results were superior to those produced in Egypt and Babylonia. In the latter two areas there were numerous occasions when gods and people met on a more intimate footing—the festival days when the statues of the gods were carried in procession for all to see—and these times of intimacy may have served to counteract the harm wrought by the lay-out of the temple.

As the temples increased in size and wealth, their personnel increased, requiring ever larger endowments for their maintenance. The temples became temple-states, little states within the state, with their own lands, serfs, warehouses, factories, schools, and libraries, a source of serious weakness to the central government, in Egypt at least.

**Winthrop Collection and Teaching.**—In *College Art Journal* iii, pp. 139–142, JULIA PHELPS lays emphasis on this bequest to the Fogg Museum in the field of fine arts education, for the general public, the undergraduate, the graduate student, and the research scholar. "For the specialist, the new acquisitions are a never-failing source for studies of all kinds. . . . No less significant are the potential discoveries to be made in the history of Mayan and Chinese civilizations. Here, too, the value of having so many originals cannot be overestimated."

### EGYPT

**Egyptian Vases in Princeton.**—*Record Mus. Hist. Art. Princeton* iii, 1944, p. 5, reports the gift to the Museum of a very fine group of twenty-eight Egyptian stone vases, several of which are fine examples of Predynastic work. From the same donor come four Predynastic flint knives.

**Egyptian Statuette in Brooklyn.**—Under the title, "Doll, Queen, or Goddess?" ELIZABETH RIEFSTAHL publishes, in *Brooklyn Mus. Journal*



1943-44, pp. 7-23 (18 figs., on 6 pls.) a bronze figurine of a nude girl, recently acquired by the Brooklyn Museum and related to a group of Late Egyptian bronzes, with movable arms, all of which are female. Up to now they have not been carefully studied. She lists fifteen statuettes belonging to this group, together with five others which may belong. Only one comes from a recorded excavation—the others were acquired by purchase in Egypt. Inlay is used for details of the body, and also for jewels and parts of the crown of the Brooklyn figure. The period is that of the Twenty-Fifth Dynasty, as is shown on stylistic grounds. All the examples have a striking facial resemblance, and suggest an Ethiopian prototype. The writer does not believe that this group represents dolls, in spite of the movable arms, nor does she consider them queens, as Egyptian queens are never represented nude. The crowned figures might be goddesses, but Egyptian goddesses, too, with the exception of Nut (to whom these figures bear no resemblance) are never shown nude. The movable arms may have a religious or magic significance. The conspicuous nudity, with its emphasis on sexual details, suggests a Syrian source, and these figures also have details in common with figurines of Asiatic origin, and crowns not unlike those on these bronzes appear on nude Phoenician figurines, which have been connected with the cult of Ishtar or Astarte, many of the decorative motifs on the crowns being found on both groups. Some of these details have been associated with the Syrian fertility cult. Also the presence of jewelry on these bronzes is common to the Syrian and Phoenician bronzes, although it may also be a Nubian trait, as certain details suggest Nubian influence. The writer, however, considers as "more than probable" a connection between this group of bronzes and Syrian representations of a nude goddess of fecundity, worshipped under various names. On the other hand, they may represent devotees of this goddess, or merely *ex-votos* to secure fecundity. It is known that Ishtar was worshipped in Egypt as early as the Eighteenth Dynasty, and Ashtarte (Astarte) in the era of the New Kingdom, and down to Roman times, but they are always represented as clothed. A Syrian nude goddess is often shown with the Egyptian fertility god Min. In the New Kingdom, an imported goddess with a Semitic name Qudshu (Kadesh) appears. She is nude, is represented in frontal view, and wears a headdress, usually the Hathor wig. It is probable that the Syrian fertility

cult never entirely gained official approval, and its goddesses were identified with native Egyptian goddesses, most frequently with Hathor. It is therefore suggested that this class of bronzes (none of which is inscribed) represents a Syrian goddess, or perhaps an Egyptian deity who has taken over the Syrian attributes. Or they may represent devotees, sacred prostitutes, or concubines of the gods. These theories cannot be considered as likely, however, as such figures, where known, are represented clothed. Another possibility is that they may represent concubines of the kings, but any hard and fast conclusion cannot be made, owing to lack of evidence. It is more probable that they are in some way related to the Syrian cult. Three pages of notes follow the article, and there are two Appendices. In the first (pp. 17-21) Miss Riefstahl lists the twenty bronzes that belong to the group. Of these, besides the Brooklyn statuette, one in the Brummer Gallery in New York, two in the Fitzwilliam Museum, and two in the Ashmolean Museum are here published for the first time. In addition a related ivory statuette in Brooklyn is published, and various other objects. The second appendix (pp. 22, 23) contains a technical examination of the Brooklyn example by RUTHERFORD J. GETTENS, giving an analysis of the bronze used, and of the materials employed in the various details where inlay is applied.

#### MESOPOTAMIA

**Kassite Kings.**—*ILN*. August 19, 1944, pp. 220-221, publishes numerous photographs of objects found at Dur Kurigalzu, in Iraq. This was the capital city of the Kassite Kings of Babylonia from the fifteenth century B.C. The illustrations and commentary are provided by SAYID TAHA BAKIR, Curator of the Iraq Museum, and Director of the excavations. The site, now known as Ager Guf, is twenty miles west of Baghdad. Excavations were started in 1942, when the *ziggurat* was laid bare—its remains still stand to a height of 200 ft. In 1943 three great temples were discovered, the walls of which were standing in sufficient height to be reroofed. The name Kurigalzu is that of the king who built them, and is everywhere inscribed on bricks. Evidence shows that on two occasions these buildings were destroyed by fire, which can be linked with the destruction of the city by the Assyrian King Adad-Nirari I, and later by Tiglathpileser I. A statue (fragmentary) of this Kassite King was found, covered with a record of his works, in the old Sumerian



language. The latest excavations disclosed the ruins of the royal palace, and yielded rich finds of important clay tablets, and many fragments of gold, and other precious objects.

**Babylonian Science.**—A valuable review of Babylonian science—its spirit, methods, and major discoveries—is presented by GEORGE C. CAMERON of the Oriental Institute, Chicago, in *Bibl. Archaeologist* vii, 2. Contrary to popular opinion, the science of astronomy dates back only to the late Assyrian period, while even astrology finds little mention in the earlier sources and did not become popular until the last few centuries B.C. "And now with the recognition that there was a Babylonian in the Academy of Plato" we can understand how the Greeks became acquainted with the discoveries of the famous Babylonian astronomers Naburianus and Cidenas. The reason the Babylonians adopted the sexagesimal numerical system instead of the decimal system employed by the Hebrews and other Semitic peoples was that they found it worked better. Whereas 10—the basic unit of the decimal system—is divisible only by 1, 2, 5 and itself, the basic unit of the sexagesimal system—60—is divisible by 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30 and itself. Cameron is inclined to scorn the incantation element in Babylonian medicine as unscientific. But may it not be that the employment of incantations is but another example of the pragmatic spirit which animated Babylonian science, a recognition that incantations worked sometimes where poultices and medicines failed. It is not necessarily a case of the survival of a "pre-scientific" stage in medical practice. But the way in which the "scientific" and "magical" remedies were intermingled shows that the Babylonian physician never came to realize that his "science" was primarily effective in the realm of the body, his "magic" effective for the soul.

#### PALESTINE

**Palestinian Alabaster Vases.**—The usual assumption that all alabaster vases found in Palestine are of Egyptian origin is challenged by I. BEN-DOR in *QDAP*, xi, 1944, pp. 93–112. Evidence is produced that just as the importation of Egyptian stone vases inspired the rise of a native stone industry in Crete in the Early Minoan period, so a Palestinian industry arose in the Middle Bronze II age under the same stimulus. The forms were at first mainly imitations of Egyptian types, only the juglets displaying origi-

nality. During the Late Bronze age imitation continued but the local industry produced two new forms: that type of *tazza* or goblet which has a high foot made of one piece with the rest (see the discussion of the various types, p. 105 f.), and the pyxis, modelled on the late Mycenaean two-handled pottery pyxis. The Palestinian product may be distinguished from the Egyptian by both material and technique. Whereas Egyptian alabaster is calcite (calcium carbonate), a translucent stone, whitish to pale yellow in color and often with bands of darker or lighter shades, Palestinian alabaster is really gypsum (calcium sulphate) and is milky white in color. The Egyptian technique was to hollow out the vase by means of stone borers or tubular drills which left horizontal marks on the inside; the Palestinian technique was to use chisels which left vertical marks. The chief centers of manufacture in Palestine seem to have been Beth-Shan, which possessed a quarry about 18 km. to the north, and Jericho.

**Numismatics.**—Some Jewish shekels dated to the years 1 and 2 were found at Silwan in a hoard of Tyrian shekels ranging in date from 13/12 B.C. to 64/65 A.D. The almost mint condition of the Tyrian shekel from 64/65 A.D. and the Jewish shekels from the year 2 shows that both types were hidden shortly after their issue, and that therefore the Jewish shekels must date, not from the time of the Maccabean Revolt but from the First Revolt, the year 2=67/68 A.D. (A. REIFENBERG in *QDAP*, xi, 1944, pp. 83–85).

A hoard of silver coins of Sidon and Alexander, discovered at Kh. el-Kerak on the south shore of the Lake of Galilee, comprised 64 double-shekels of the last two kings of Sidon and of Mazaeus the Persian satrap, 40 tetradrachms of Alexander and 13 of Philip Arrhidaeus, and 1 didrachm of Tyre, the last being probably intrusive. The tetradrachms of Alexander and Philip come from eleven different mints from Greece to Babylon (J. BARAMKI in *QDAP*, xi, 1944, pp. 86–90).

#### TRANSJORDAN

**Model Shrine.**—A model pottery shrine of Phoenician style is illustrated and discussed by J. H. LIFFE in *QDAP*, xi, 1944, pp. 91–92, pl. XXI. The pillar on either side of the entrance is surmounted by a capital with double volutes, the upper volutes being turned inwards. Over the doorway is the figure of a dove with outspread wings, suggesting that the shrine was used in the cult of Astarte, probably as a receptacle for



offerings. "Although of an entirely novel form, it belongs to a group of religious furniture of the First to Second Iron Ages which has been excavated for the most part at Beisan and Megiddo . . ." It is alleged to have come from Transjordan and probably dates from the tenth or ninth century B.C.

**Transjordan Pottery.**—Our knowledge of Transjordan pottery forms has been considerably enriched by the contents of two tombs at 'Amman published by LANKESTER HARDING in *QDAP*, xi, 1944, pp. 67-74. The most interesting forms are discussed by E. HENSCHEL-SIMON in *ibid.*, pp. 75-80. These include five tripod cups, a lamp with the rim pinched across the middle, a stepped bowl, a pottery lantern (the first pre-Roman lantern to be found in Palestine or Transjordan), a pottery horse and rider, a bull rhyton of probable Cypriote origin, some "red slip" jugs, probably of eighth century Cypriote origin, and no less than eleven handleless pointed bottles which seem to be connected with the bulk of the contents, which are Iron Age II, rather than with two intrusive Hellenistic *lagynoi* (see the discussion of these bottles, pp. 75-77). Decoration in black and white is fairly common, while the "crowstep" motif which appears later in Nabataean architecture appears twice here as a decorative design.

**Seals from Transjordan.**—One of the 'Amman tombs, the pottery of which is discussed in a separate article, yielded an ivory seal in the form of a small cylinder with an (assumed) loop at one end and an inscription on the base of the other end. G. R. DRIVER says the script is similar to that found on Hebrew seals of the eighth century. He reads *l'lyš'* or *l'lyš'*. The script of another seal purchased at Petra is regarded by him as lying between that of the Moabite Stone and the Têma Inscription. He reads: "belonging to Bē-'ēzer-'ēl son of 'Abdī-ba'al" (*QDAP*, xi, 1944, pp. 81-82).

## IRAN

**Nishapur.**—CHARLES K. WILKINSON discusses, in *BMAA*, n.s. ii, 1944, pp. 282-291 (11 figs.) *Heating and Cooking in Nishapur*. Beginning with a statement of the frequent discovery, in excavations, of objects and utensils the function of which is uncertain, he endeavors to bring into line, by comparison with later practice, certain of such objects. He cites the work of Ibn Battuta, the great Moroccan traveller of the early fourteenth century, who states that in his time the use of charcoal in Persia was unknown. This is not true,

as it is not only used intensively there today, but evidence shows it to have been used in Nishapur in the ninth and tenth centuries. He then quotes the account of Sir John Chardin, who lived in Persia in the seventeenth century, and who describes the fireplaces used in his day. At Nishapur many inner rooms were furnished with a central hearth enclosed by a rectangular plaster frame raised slightly above the level of the floor. Into the center of the hearth a jar, or stone pot, was sunk as a brazier to hold the coals, while about two feet away was an orifice connected by a pipe with the bottom of the pot, to supply a draught. These fireplaces were not primarily used for cooking, as kitchens were also discovered, supplied with ovens, or crude stoves for wood or charcoal. In these fire-pots, charcoal was often found. To make the heating efficient, a table was placed close to the fire, and covered with rugs, with which the occupants covered themselves, sitting on the table and keeping themselves very warm. This method is still used, but curiously enough it has not as yet been found represented on Persian paintings. Some cooking was undoubtedly done over these sunken fireplaces, but at Nishapur no portable metal braziers were found. A fine brazier of the thirteenth century, in the Moore Collection in the Metropolitan Museum, is published, to show the uses to which such an object was put. This example is fitted with hooks for holding a spit. Stone statuettes of animals, found at Nishapur, with V-shaped notches in the middle of their backs, are believed to be supports for spits, and were stood in pairs on the plaster hearths, on each side of the fire-pot. Most of the cooking, however, was done in the kitchens, on open fires of wood or other fuel. Cooking vessels of different shapes were found in such rooms, many of which were of stone, the others of pottery or metal. Similar utensils are still used, but at Nishapur these utensils were of far superior workmanship to the present-day examples. For making bread, which was unleavened and baked in thin disks, the Museum's expedition found, at the Sasanian-Islamic site of Kasr-i-Abu Nasr, stone and pottery three-legged tables for rolling out dough. These utensils, likewise, are still used in Persia, but they do not seem to have been used at Nishapur.

## GREECE

### GENERAL AND MISCELLANEOUS

**The Dodecanese.**—The Dodecanesian National Council of New York publishes a pamphlet on



these islands by DAVID M. ROBINSON (30 pp., 20 figs.). Each island is described, together with its history and antiquities. Especial attention is given to Rhodes, which takes up about one half of the pamphlet, as the most important of the group, but there are good accounts of Cos and Patmos, and the other islands are given adequate treatment. The pamphlet is preceded by a biographical sketch of the author.

### SCULPTURE

**The Golden Nikai of Athena.**—DOROTHY BURR THOMPSON in *Hesperia* xiii, 1944, pp. 173–209, examines the evidence for the Nikai dedicated by Pericles and his successors on the Acropolis. They were dedicated for the purpose of fortifying the state by great reserve funds, which could on occasion and in emergency be converted from golden statues into money. The first mention extant of the golden Nikai occurs in a decree of 434 B.C., and their subsequent history can be traced in various inscriptions down to the middle of the fourth century B.C. The records of the golden Nikai are unique in being the only surviving descriptions of ancient statues written by contemporaries of their sculptors. Mrs. Thompson lists in tabular form the Nikai discussed and the evidence attesting them. Presumably they celebrated Athenian victories. The amount of gold assigned to the construction of a Nike evidently was intended to be two talents. In general the figures fall into three groups: those dedicated before 425 B.C., those dedicated after 425 B.C., and one dedicated in the early fourth century. The appearance of the earlier group can only be surmised from the type popular at the period. The Nikai probably floated quietly forward in frontal pose, extending an open wreath or fillet or holding naval emblems in one or possibly two hands. The number of Nikai mentioned in fifth-century inscriptions reaches a possible maximum total of twelve. Obviously a Nike cannot be recognized unless sufficient details of her appearance are preserved, and consequently Nikai may reappear in inscriptions, but certainly a minimum of eight Nikai were extant before the crisis of 406/5 B.C. In the latter part of the fourth century several, if not all, of the original Nikai were recovered with gold, perhaps by Alexander, but they were soon to lose it at the hands of the tyrant Lachares. Mrs. Thompson lists in her careful descriptions of the Nikai their several parts and ornaments mentioned in the inscriptions, where they are usually grouped

together at the head of the treasury lists. The Nikai could be dismantled part by part as need arose. The last Nike on IG. i<sup>2</sup>, 369 is the work of the sculptor Timodemos, possibly to be identified with a gem-cutter of the same name.

**Loot of Art Treasures from Florence.**—The *London Times* for October 6, 1944, gives an itemized list of the more important works of art stolen by the Nazis from Florentine galleries and museums. Between 450 and 500 paintings and statues are known to have been removed by them, ostensibly "for safe keeping." Among the sculptures missing is the Medici Venus.

### INSCRIPTIONS

**Greek Inscriptions.**—BENJAMIN D. MERITT publishes in *Hesperia* xiii, 1944, pp. 210–266, nineteen inscriptions and two corrections on inscriptions already published in *Hesperia* iii, 1934. These inscriptions include in order of publication no. 1, an early grave monument of the late sixth century in Pentelic marble, a funeral pillar with a vertical inscription. No. 2 consists of two fragments of Pentelic marble, part of an inscription, now published in IG. ii<sup>2</sup>, 55. The lettering is Ionic, in stoichedon pattern, dating about 428/7 B.C. The text records an oath sworn to by the Aphytians vis-à-vis the Athenians and the colonists in Poteidaia. The siege of Poteidaia by the Athenians lasted from the summer of 432 to the winter of 430/29. After the capitulation the Athenians sent colonists there and the present decree, setting up a *modus vivendi* for the colonists with the neighboring Aphytis, was probably arrived at in the autumn of 428 B.C. The Athenians, as the present text shows, made Aphytis a focal point in the administration of their empire, and modelled their accommodations to Aphytis on the pattern of those previously made at Methone. The decree deals with such matters as the importation of grain into Aphytis, the payment of tribute permitted by the Athenians, that is, of the quota due only to the goddess Athena, comparable to the arrangement enjoyed by Methone. In the previously published part of the inscription is a fragment with sculptured decoration, the figure of a seated woman, in low relief, holding a libation cup in her right hand, and representing a pictorial record of the consummation of the decree, probably the city or people of Aphytis itself, perhaps personified as the Aphytian Tyche. No. 3 embodies the usual formal provisions for a grant of Athenian citizenship to Aristomenes. No. 4, a fragment of a



choregic monument, is similar to *IG. ii 2, 3027*. No. 5, dated ca. 321 B.C., is a decree of the orator Demeas, son of the notorious Demades, both of whom were killed by Kassandros in 319 B.C.; no. 6, a decree of Demades, 320/319 B.C., son of the famous Demeas; no. 7, an inscription in praise of Mikalion comparable in lettering to *IG. ii 2, 557*; no. 8 a decree of ca. 300 B.C., honoring the sitophylakes of the city of Athens, a board of six men and their secretary, whose function was to arrange the fair distribution of grain and reasonable price control of commodities as described by Aristotle. No. 9 deals with the right of asylum at Smyrna and in the sanctuary of Aphrodite Stratonikis about 246 B.C. No. 10 contains Athenian praise of the Ephesians ca. 200 B.C., in an inscription containing the formula of resolution and the granting of a crown. No. 11 contains a Delian inventory of ca. 166 B.C., a fragment to be added to three already published in *Hesperia* iii, 1934, no. 39. No. 12 is a supplement to three fragments of a decree honoring the prytaneis of Kekropis, published by Dow in *Hesperia*, Supplement I, 1937, pp. 156-158, n. 89. Nos. 13, 18, and 19 are pieces from grave monuments; no. 14 is a fragmentary sculptured relief of a figure seated on a chair, facing right, with a foot resting upon a stool, presumably part of a funeral stele. No. 15 is a dedication of Roman date, 49/48 B.C., containing the name of Demochares, the archon. No. 16, like *IG. ii 2, 3324*, is a dedication to the emperor Hadrian ca. 132 A.D. No. 17, ca. 150 A.D., is part of an inscribed herm.

### ROMAN BRITAIN

**Roman London.**—The *London Times* for September 9, 1944, prints a long article (with map) in which some of the discoveries through enemy bomb attacks are described. Nothing accurate is known of London before the invasion of Claudius in 43 A.D., and there is another gap in its history between 410 and 600; but in the intervening period "we are on firm ground — the Roman period presents us with solid facts." Of these, the most solid is the Wall, which can be plainly traced from the Thames, near the Tower, to Ludgate on the East, while on the West it joined the Thames at the mouth of the Fleet River. New views of the Wall have been provided by air raids, near Cripplegate, and belong to the most impressive remains still above ground. One of these views is just north of Tower Hill — before December, 1940 a house stood directly above it. It is thought to be preserved to its original height. Another piece, dis-

covered by enemy action is back of the Crescent, and it, too, had been concealed by a house. The west side of this part of the Wall is preserved to its original height, and has a sentinel's walk and protecting breastwork. It stands 20 ft. above present ground level, but the ancient level was 15 ft. deeper. Mention is also made of other fragments previously discovered, containing an inscription which takes us back to at least 61 A.D., when there was yet no Wall. This inscription was on a memorial monument to a certain Gaius Julius Alpinus Classicianus, set up by his "uxor infelix," Julia Pacata. This man is mentioned by Tacitus as Procurator at the time of Boadicea's rebellion—his wife's father also is named by Tacitus.—*ILN.* for Sept. 16, 1944, p. 332, publishes a page of photographs of these new discoveries, together with a drawing of a reconstruction of Roman London, showing the line of the Wall.

### EARLY CHRISTIAN AND BYZANTINE

**Man and Angel.**—Under this title, FRITS LUGR, in *G.B.A.* ser. vi, xxv, 1944, pp. 265-282 (22 figs.) takes up the study of the representation of angels in Christian art. Commenting on the fact that the first thing that the average person thinks of in connection with angels is wings, he shows by illustrations that the earliest representations of angels in the catacombs, tombs, and early mosaics, in Rome at least, are wingless. The feminine type, so common in art from Fra Angelico down, was originally very strongly masculine, and was thus a continuation of the oldest Jewish tradition. (To the Jews, the cherubim seem to have been winged human-faced animals, "an intermediate form between the wingless sphinx of the Egyptians and the winged bull of Assyria and Babylonia," while the seraphim were serpent-like winged figures). The scene of Joshua and the angel in the mosaic in Sta. Maria Maggiore in Rome (dated 432-440) shows the angel wingless, but as early as the eighth century, a miniaturist in a MS. in the Vatican gives him wings in portraying this same scene. In a sarcophagus of the late fourth century at Ferno, wingless angels appear in connection with scenes from the life of St. Peter. The so-called "Dogmatic Sarcophagus" in the Lateran, also of the fourth century, is discussed. Here angels are represented as bearded men. A small fourth-century ivory in Munich, of the Holy Women before the tomb of Christ, likewise shows the angel guardian as a wingless young man in a white



garment. Winged figures were, however, retained for purely decorative purposes. A fine Christian sarcophagus of the fourth century, discovered in Istanbul in 1933, shows two beautiful winged figures supporting the monogram of Christ, but these figures have no true angelic significance. Nevertheless they are adopted by late Roman and early Byzantine artists, and in the fifth- and sixth-century mosaics at Ravenna they are very obvious. Thus in the ceiling of the archbishop's chapel, St. Matthew is represented as a young man with wings, but the attendant angels are wingless. Gradually all winged figures begin to be taken for angels. In a mosaic, again from Sta. Maria Maggiore, representing the Annunciation, all the angels are winged — this mosaic is usually dated in the same period with that cited above, i.e., 432–440. Another Annunciation, on a Carolingian ivory in Berlin, gives the angel as wingless. In the late fifteenth century a pair of Flemish tapestries in Madrid, one of the Archangel Gabriel entrusted with the Annunciation and the other of the delivery of the message to the Virgin, both show the angel without wings, and dressed as a messenger. In the case of representations of Jacob wrestling with the Angel, immortalized on canvas by Rembrandt and Delacroix, both of whom give the angel wings, we find that in one of the earliest instances, the Vienna Genesis of the sixth century, the angel is represented as a human being without wings. But in this same MS., angels in their capacity as messengers are depicted with wings, showing that the wings were intentionally omitted in the Jacob story. As early as the ninth century, however, the angel was winged, and he so appears in the twelfth-century mosaic of the subject in the Palatine Chapel in Palermo.

**Alleged Portrait of Heraclius.**—In *Byzantion* xvi, 1, 1942–1943, pp. 162–164, OTTO KURZ reinterprets a portrait which appears in *Ms. I B 18* of the Biblioteca Nazionale of Naples, a fragmentary copy of a Coptic version of the *Book of Job* and the first three chapters of the *Book of Proverbs*. On the last folio of the *Book of Job* appears a pen drawing of a standing male and three female figures, the former crowned and nimbed and one of the latter also crowned; all four are richly clad and bejewelled. The date of the manuscript is not under discussion, since it is generally ascribed to the seventh century, but opinions differ as to the subject of its illustration. Originally interpreted as a representation of Job and his daughters, it was later pointed out by Ainalov that, since

the drawing had no connection with the story of Job as told in the Bible, it was probably the portrait of an imperial family, similar in type to the mosaics of San Vitale. Advancing from this point, Delbrueck proceeded to identify the male figure as the Emperor Heraclius, accompanied by the Empress Martina, his sister Epiphania the Elder and his daughter Eudoxia, thus dating the miniature around 620. Although this interpretation has been generally accepted, it does not explain the appearance of the imperial family in the middle of a Coptic manuscript between the *Book of Job* and the *Book of Proverbs*. Kurz therefore offers the following solution.

Job in royal garments has no place in his story as told by the familiar versions of the Bible. The Coptic text, at the end of which the problematic drawing appears, is, however, a rendering of the *Septuagint*, and here the final chapter—found neither in the Hebrew original, in the Vulgate, nor in any European version—declares that Job's name was originally Jobab and identifies him with Jobab, King of Edom. Thus the meaning of the drawing as illustration of the text becomes clear. It does not show Job the pious sufferer, but Job-Jobab, King of Edom, with his three daughters, Hemera, Kasia and Amalthaeas at his side.

**Samson and the Lion.**—In *G.B.A.* ser. vi, xxv, 1944, pp. 257–264 (13 figs.) WOLFGANG BORN publishes a carved oak panel from a door at Annisfield Castle, Dumfries, now in the National Museum of Antiquities of Scotland in Edinburgh. It bears, beside the Charteris arms, a relief of a bearded man rending the jaws of a lion. The technique is archaic, with flat, conventionalized forms. This theme is familiar in every period of art. It appears in Mesopotamia on seal cylinders and elsewhere from ca. 3000 B.C. In Iran it is found at the turn of the second millennium B.C., and in the Achaemenid period is represented by a relief from Persepolis (illustrated) and continues through the Parthian and Sasanian periods (a silver plate in Leningrad is illustrated). Close in resemblance to the Scottish relief is an Asiatic silk in the Sens Cathedral Treasury. In Greece, the strangling of the Nemean Lion by Herakles is familiar to all. With the spread of Christianity, the lion slayer becomes either David or Samson. (For David, see *I.Sam.* xxxiv, 37; for Samson, *Judges* xiv). David is shown on a Byzantine silver plate in the Metropolitan Museum. For Samson, we often find a design of mixed Hellenistic and Sasanian character, posed like Mithras and the



Bull, or Herakles and the Keryneian stag. Only Samson is at first represented as rending the lion's jaws. This motif appears in Romanesque sculptures and Gothic carvings and woodcuts. In the Renaissance it loses its religious significance and reverts to Herakles and the Nemean Lion. The early Christian theme of David and the Lion was introduced into Ireland from illustrated psalters, and from Ireland it spread to Scotland. The influence of the Near East on early Irish art is noteworthy. A relief from a sarcophagus in the Cathedral Museum at St. Andrews, Fife, dating ca. 1000 A.D., shows a mounted figure in combat with a lion, which is attacking a flock of sheep. The prototypes for this scene are definitely Oriental. At the right of the scene, David (identified by a lamb beside him) is rending the jaws of a lion. The figure on the door panel is Samson, identified by his long hair, and the absence of any of the attributes of David. "In any case, the ultimate Oriental origins are unmistakable." That these influences persisted to late times, is proven by incised details on a Scottish harp, dated in the fifteenth century, and by an Iranian pattern on a powder-horn, dated in 1678, both in the same Museum in Edinburgh.

**Mediaeval Athens.**—An interesting and informative article by KENNETH M. SETTON, entitled *Athens in the Later Twelfth Century*, appears in *Speculum* xix, 1944, pp. 179-207. After pointing out that the history of Athens in the earlier Middle Ages must be put together from occasional references in the Greek chroniclers, from some inscriptions of disputed value, and from lead seals and the like, the author proceeds to a study of the social, economic and cultural history of the city on the basis of the fairly copious writings of Michael Acominatus, who served as Archbishop of Athens, probably from 1175 until the occupation of the city by the Franks early in 1205. His life in Athens became "a constant struggle of right against wrong, of virtue against vice," and his many petitions, sermons, and letters to those in high places, seeking relief from present evils and redress for past injustices, stand as a lasting memorial of his burning love for Athens and his courageous devotion to the Athenians both during his term of office and after his expulsion from the city.

We are fortunate enough to possess the first sermon which he preached to his flock in the Parthenon shortly after his arrival, an eloquent discourse packed with learned allusions to its former glory and bright with hopes for the future.

But in the days which followed he completely lost the few illusions he had cherished concerning his parishioners. The Athenians had become a barbarian horde, they no longer had any desire to search for wisdom, and Michael generally laments the decline of the land as well as the people, who, he declares, are oppressed by a swarm of lesser officials. One of the most constant and characteristic features of the social and military life of twelfth-century Attica, moreover, was piracy, which the imperial government was unable to suppress; the islands of Salamis, Aegina and Makronesi were pirate strongholds, and Michael's writings abound in references to pirates. He complains, too, that the Athenians were weighed down with a load of taxation two or three times heavier than that upon neighboring districts, that the governor (then apparently resident in Thebes) was high-handed and abusive, and that Attica itself was being ruined. And yet, despite her pirates and governors, and despite Acominatus' statements to the contrary, Athens was still a city of some importance in the later twelfth century since it was included in Byzantine commercial agreements with the Venetians in 1148, 1187, and 1199. Although silk seems to have been woven in Athens in the very late Empire, there is no evidence that Athenians of the later twelfth century were engaged in this highly lucrative occupation. The city, however, did some manufacturing, but probably only of a domestic character, and the soil of Attica was not as fertile as it had been in antiquity or as it is in modern times. Honey still came from Hymettus and the vine and olive flourished, but the wine was not good, seeming, says Acominatus, "to be pressed from resinous pines rather than from clusters of grapes," obviously the "krasi retsinato" so popular in Greece today. The production of wheat was generally inadequate, and in the time of Michael the city suffered a grievous famine.

By a decree of Theodosius II, dated November 14, 435, all pagan shrines and temples had been ordered closed, and it was probably not long after this, and certainly before Justinian's time, that the Parthenon and Erechtheum were converted into Christian churches. The former, rededicated to the Virgin Mother of God (*Theotokos Atheniotissa*), became the cathedral of Athens, and many pilgrims visited the city in the Middle Ages to worship at this famous shrine. But Athens possessed other fine churches, the most notable, after the Parthenon and Erechtheum, being the The-



seum, which Acominatus knew as the Church of St. George in the Cerameicus. There were also in the twelfth century the little Kapnikarea, founded by a certain Kapnikares, the Panagia Gorgopico with its curious reliefs, and the Church of St. Theodore, which had been built a century and a quarter before Michael's arrival. Outside the city stood the shrine of the Athenian Martyr Leonidas, and scattered throughout Attica were a score of abbeys and monasteries, chief among them the abbey of Kaisariane, the monastery of St. John the Hunter, apparently restored in Acominatus' own day, and the well known monastery of Daphni. All of these establishments were fitted into attractive settings where the Greek monks could indulge their superior capacity for living.

In converting the Parthenon into a Christian church certain changes were necessitated by the basic structural difference between the church and the Greek temple, and these alterations are summarized by Setton on the basis of Michaelis' study. He also discusses its decorations in fresco and mosaic and notes that Acominatus "further beautified it, provided new vessels and furniture, increased its property in land and in flocks and herds, and augmented the number of the clergy." When, like the Parthenon, the Erechtheum was converted into a church, perhaps dedicated to the Savior, its orientation was reversed and drastic changes made in its interior. It is assumed that the little temple of Athena Nike served as a chapel in the Middle Ages, although nothing is known of it. From the time of Justinian the Propylaea constituted the fortress of the Acropolis and was also used as a residence, apparently as the house of the archbishop; Acominatus probably lived there, but his quarters must have been cramped if the front and back porticos remained open to afford public access to the Acropolis itself. As to the condition of the lower town and its famous buildings in the twelfth century we know comparatively little. Acominatus complains that Athens had lost the very form and appearance of a city, her walls stripped and demolished, the houses of her people razed to the ground and their very sites under cultivation; he could find no trace of the Heliæa, the Peripatos or the Lyceum, and declares that in the meager remains of the Stoa Poikile sheep were grazing, while the Agora itself had become a pasture. He seems to have known very little about the famous buildings of the Agora, except for the Poikile, although in his time considerable remains of the others may still have appeared above

ground. We search in vain in his extant works for mention of the most famous and impressive structures. He never refers to the ancient city gates, to the Stoa of Hadrian (unless this is what he takes to be the Poikile), to the Tower of the Winds, the Odeum of Herodes Atticus, the Theatre of Dionysus, the Arch of Hadrian, the Olympieum, the Philopappus monument, the Stadium, or the aqueduct of Hadrian and Antoninus Pius; and we learn nothing from him of the remains of the Academy. The choregic monument of Lysicrates he calls "the lantern of Demosthenes," the first known mention of the monument by this name.

Although Michael Acominatus stood out for about a quarter of a century as the brave protector of the Athenians, he had finally to succumb to the vastly superior forces of the Fourth Crusade under Boniface of Montferrat. With the Latin occupation of Athens the beautiful church of the Panagia, the ancient Parthenon, was plundered, and Michael's fine library was carelessly scattered by its new possessors. He himself wandered through northeastern Greece for almost a year, settling finally on the island of Ceos where, like Adam cast out of Eden, as he puts it, he looked with longing across the waters of the Saronic Gulf to the shores of Attica. He spent the last sixteen years of his life at Ceos, returning to Athens in 1215 for one brief and perilous visit. He died about 1220 and was buried at the monastery of John the Baptist on Ceos.

In the Comnenian Renaissance of learning and literature Athens played no part, although her name was revered by classical scholars of the twelfth and thirteenth centuries. Cosmas of Aegina, who became Patriarch of Constantinople in 1146, and Bardanes, later Archbishop of Corcyra, both bore the surname Atticus as an appellation of distinction, and in Michael's own day an Athenian, John, became Archbishop of Thessalonica. A few fine manuscripts, moreover, bear witness to having been copied in twelfth-century Athens. But the clergy of Athens, according to Michael, were an evil lot, and the ignorance of the Athenians staggered their archbishop. Nevertheless, his chief love remained Athens, despite his lament that time had sunk her beauties "in the depths of oblivion" and that her very name would have perished from the memory of man, had not its continued existence been secured by the valiant deeds of the past and by her famous landmarks. The Acropolis, the Areopagus, Hymettus and Piræus, like some unalterable works of nature, stood



secure, "beyond the envy and destruction of time."

**Illumination in Constantinople.**—KURT WEITZMANN contributes to *GBA*. ser. vi, xxv, 1944, pp. 193–214 (14 figs.), a study of Byzantine book illumination at the time of the Latin conquest of 1204, and thereafter. He takes issue with Kondakoff, who considers illumination of this period to be "degenerate" and that even after the return of the Palaeologi in 1261 it "never recuperated from its breakdown." This theory, advanced in 1886–1891, has been followed by most Byzantinists. The first break with it was made by Alpakoff in 1930, who, in comparing Palaeologan illuminations with Russian icon-painting, showed the formative elements of late Byzantine art, and proved that certain manuscripts of the fourteenth century had been dated by Kondakoff several centuries too early. But even these defenders of the Palaeologan school had nothing good to say for the work produced in the Latin conquest, and characteristic statements of scholars about this period are quoted. Nevertheless, the most profound infiltration of the Byzantine style into the West occurred at precisely this period, particularly in Germany. Previously it had been supposed that this was due to the arrival in Europe of the spoils from Constantinople after its capture in 1204. This theory, however, is open to serious objection. A most important manuscript in this connection is a sketchbook at Wolfenbüttel (cod. 61.2) which has on twelve leaves figures and scenes from the New Testament, correctly dated between 1230 and 1240. The archetypes for these sketches are identified by the author with two Evangelists in a Greek Gospel (cod. 118) in the National Library at Athens. From this we learn two facts: (1) that the connection between Western painting and Byzantine illumination is closer than has been supposed, and (2) that the Athens codex cannot be far removed in date from the Wolfenbüttel sketches, and a date for it in the first part of the thirteenth century is most probable, although it has hitherto been dated as early as the eleventh, and as late as the fourteenth. But the Athens Gospel is no isolated document, as many manuscripts exist which are stylistically related to it. Most closely connected is a Gospel now at Princeton, formerly in the Athos library of Andreaskiti, where the Luke is almost identical with the Mark at Athens. To this manuscript, too, a widely divergent list of dates has been given, but the

author agrees with Friend in assigning it to the thirteenth century. With this comes also a Gospel of the Athos monastery Iviron, where the Mark is identical with the Princeton Mark, and the John with the Princeton Matthew. One might almost say that these two Gospels were illuminated by the same hand. The Iviron Matthew is also identical with the Athens John. Furthermore, the Iviron Gospel has some thirty illustrations from the Life of Christ—one of these is illustrated, and is contemporary in style with the portraits of the Evangelists, "thus proving the existence of narrative cycles of the New Testament in the thirteenth century." Both in the Athens and the Iviron Gospels some Latin inscriptions are found. The Iviron codex is usually dated in the twelfth century, but the thirteenth is more probable. Iviron brings with it a Gospel in the Bibliothèque Nationale (cod. gr. 54). Here again the figure of Mark shows strong resemblance to those in Princeton and Iviron, and it looks very much as if the Paris manuscript were copied directly from Iviron by an inferior artist. Furthermore, in this case the entire text is bilingual, with the Greek on the left and the Latin on the right. Weitzmann dates this during the period of the Latin empire. Now the question arises, what was the earlier phase from which these Gospels came? The answer may be found in another Gospel in the Athos monastery Philotheou (cod. 5). The finest illumination, that of Mark, is the prototype of Princeton, Iviron and Paris. Returning to the Wolfenbüttel sketchbook, there was a short earlier phase in Europe, where soft folds of drapery were used instead of the hard and broken type—the outstanding example is the Ingebourg Psalter in Chantilly (cod. lat. 1695) and the school that produced it (beginning of the thirteenth century) may have been dependent on Byzantine models like the Philotheou Gospel. Another example is in the Vatican (cod. gr. 1208) where the Luke resembles the Mark of Philotheou. The model of the Vatican manuscript was probably of the tenth century Macedonian renaissance, but it itself is probably of the thirteenth. Of scenes other than New Testament, one of the most extensive miniature cycles in Byzantine illumination is contained in the Octateuch. To the same period as the preceding Gospels can be ascribed that in the Athos monastery Vatopedi (cod. 602) of which only the books from *Leviticus* to *Ruth* are preserved. A comparison with some of the scenes in the Octateuchs of Smyrna and



Istanbul, known to belong in the twelfth century, shows a later date, and details of drapery are similar to the Athens and Princeton Gospels. The writer therefore dates it in the thirteenth century, wherein he differs from most scholars. Another Old Testament manuscript which the writer places in this group is a Psalter in the Vatican (cod. Barber. gr. 285) recently published by De Wald, who had dated it in the late tenth century. Weitzmann then discusses the monumental paintings of Byzantine art of the thirteenth century, as found in Serbia at Nerez, Milesevo, etc., to see if they throw light on the illuminations. It has been proven that many of these frescoes, formerly considered Palaeologan, must be dated earlier, and reflect the period of the last Comnenes. The manuscripts discussed above belong to the same artistic movement. Unfortunately, however, the *dated* manuscripts of this period do not seem to have been produced in Constantinople. But a clearer contradistinction can be made between the manuscripts studied above and dated examples of the end of the thirteenth and the fourteenth centuries. Two examples are illustrated, both of Mark, one in the Athos monastery Pantokrator (cod. 47), written in 1301, the other also at Athos (Vatopedi 938), written in 1304. Both show a distinct deterioration from the earlier group. The study, therefore, reveals the existence of good illumination in the Latin period, which made its influence felt in Europe.

**Gospels of Bert'ay.**—A hitherto unpublished manuscript deposited in the library of Andover-Newton Theological School is discussed at considerable length by R. P. BLAKE and SIRARPIE DER NERSESSIAN in *Byzantion* xvi, 1, 1942-1943, pp. 226-285. The manuscript contains the four Gospels written on parchment in *asomt'avruli* (capital) characters, preceded by miniatures of the four evangelists and three folia with canon arches. Fols. 1-5 appear not to have formed part of the original codex, as they are excluded from the quaternion count. The book was written probably in the tenth century in the monastery of Bert'ay, for the existence of which we have no other evidence. The first part of the article in *Byzantion* is concerned with matters of palaeography, translation, text criticism, etc., while the second is devoted to a study of the miniatures.

The portraits, framed by a plain red band, show the evangelists standing in pairs on a dull green ground, turned slightly towards one another and holding the closed book of the gospels in their

left hands. Matthew rests his right hand on the book, the other three are blessing. The upper part of the background, down to the shoulders of the evangelists, is ultramarine and bears their names in white capitals, and each name is again written in a miniscule of late date on the gold nimbus. From the shoulders of the evangelists to the hem of their garments the background is in a heavier layer of indigo blue, repainted over the original ultramarine. The style of the portraits, painted at the same time as the canon tables, suggests the tenth century, as does also the iconography; the repainting may have been done at any time after the fourteenth century. Armenian and Georgian painting, being very conservative, retained the earlier method of representing the evangelists in pairs and turned slightly towards one another, and a second conservative trait of the Bert'ay Gospel appears in the portrayal of John as young and beardless.

The canon tables are inscribed under decorative arcades formed by a large round arch on two columns. In some cases an architrave forms the base of the lunette, in others smaller arches are enclosed by the main embracing arch. In the former, the rectangular space limited by the columns, the architrave and the base band may be divided into as many pericope-columns as needed; in the latter, the pericope-columns correspond to the number of smaller arches. These irregularities, in addition to the crowded aspect of the last two pages, clearly indicate that the distribution of the canon tables does not follow the plan devised by the person who painted the canon arches. The present arrangement is unusual also in other ways; e.g., the number of pages must originally have been nine, although Byzantine and Armenian manuscripts of the period devote either seven or eight pages to the canon tables. A ten-page type appears about the middle of the tenth century and is generally adopted from the eleventh century onward. The arcades have a fine monumental aspect; their columns, which simulate marble or porphyry, are of uniform width as in the Greek manuscripts instead of tapering slightly as in Armenian examples. The architectural effect is maintained also in the pages with smaller inscribed arches, the half-dome which seems to rest on the latter recalling the exedrae in churches such as San Vitale. Structural logic, however, is not consistently maintained, since thin lines instead of columns appear beneath the smaller arches and the embracing arches do not rest



squarely on their supporting capitals. Outside actual works of architecture, the closest analogies to the structures of the Bert'ay canon tables are offered by the mosaics of the church of St. George in Salonica and in those of the great mosque at Damascus. In the former, the exedrae with small arches supporting a half dome are exact replicas of the architectural form less ably rendered in the Bert'ay Gospel. Since, in the general evolution of decorative arcades, the monumental quality gradually declines, the imitation of exedrae cannot be considered as an innovation on the part of the tenth-century miniaturist. It is rather a unique survival of an early type.

The decorative pages of the Bert'ay Gospel show an eclectic character, some motives highly conventionalized, others drawn with greater freedom and naturalism than in most tenth century manuscripts. Yet these contradictory traits appear side by side on the same page and cannot be attributed to different hands. Many signs point to a model which had retained, in part, the style and form of a late antique example. But despite the presence of motives which occur more frequently in monuments of an earlier date, the painted folios of the Bert'ay Gospel must be assigned to the tenth century, because of the style of the evangelist portraits and the many similarities between the canon arcades and those of tenth-century manuscripts. It is difficult to indicate an exact date, but it seems probable that the decoration is contemporary with the copy of the text or only a little earlier than 941-988. The distant prototype was obviously a Greek work, but the immediate model of the Bert'ay Gospel must have been an Armenian manuscript. A study of historical circumstances plus the evidence of literary connections add weight to the conclusion reached through stylistic and iconographic analogies and give further reason to assume that the model of the Bert'ay Gospel may have been drawn from Armenia. Its illustration not only contributes to our knowledge of Georgian painting in the tenth century; it also opens a new chapter in the history of canon table decoration. Although it would be rash to attempt to assign a date or place of origin to the remote prototype which may be discerned through this manuscript, it is clear that several of the less common motives point to the eastern provinces rather than to Byzantium.

#### MEDIAEVAL

**Destruction in Normandy.**—The *London Times*

for July 19, 1944, in a report from the front, speaks of the efforts being made by the United Nations to protect and preserve historic and artistic monuments and archives in Normandy. The thirteenth century church of Norrey-en-Bessin, a "miniature cathedral," which was utterly destroyed, is an exception. Captain Bancel La Farge of the United States Army, who is adviser to the British Second Army, is having inventories made of all documents and damaged buildings. It is thought that at Caen the fourteenth-century church of St. Pierre can be restored, also the Hotel d'Escoville, of which the original plans and measurements are preserved. The churches of St. Nicolas and Notre Dame de Gloriette are intact, as are the two abbeys built by William the Conqueror. The Hotel de Ville and the museums at Caen are ruined, but the rarest treasures were removed to a place of safety. The University library, however, with the exception of the most valuable archives and the city records, is entirely destroyed. An editorial in the same number of the *Times* summarizes this report, and recalls England's vital interest in the preservation of what may remain of her Norman past.

**Interpretation of Sculpture at Vézelay.**—In *The Art Bulletin* xxvi, 1944, pp. 141-151, ADOLF KATZENELLENBOGEN offers his interpretation of the scene in the central tympanum in the narthex of the Abbey Church of Sainte-Madeleine at Vézelay. The author believes that the scene is not solely related to events on the day of Pentecost, as Male has suggested, nor to the day of Ascension, Fabre's theory, but rather, on the analogy of the scene in the tympanum of the western portal of the church at Anzy-le-Duc, is a telescoped representation of two events—"the *Ascension of Christ* is supplemented by the sculptural rendering of his predictions. . . . The representation of the ascending Christ who leaves His apostles and is received into a cloud is merged with the *Mission of the Apostles* and with the giving of complete and final power through the Holy Spirit in what may be called an encyclopedic representation of the Mission." Three specific tasks, assigned by Christ to the Apostles, are represented on the tympanum: the power to save or condemn, the preaching of the gospel, and the power of healing and of driving out devils. "The Vézelay tympanum is a complete, encyclopedic *Mission of the Apostles*, in which these tasks and the bestowing of power to perform them are



merged. The content of the tympanum has its sources in the Acts and in the Gospels, in the prophecies of Isaiah and in Geographical writings of antiquity and of the Middle Ages which describe the appearance of foreign and monstrous races." The tympanum dates in the period between the first and second crusades. The work of the Apostles had to be done over again. The *Mission of the Apostles* thus symbolizes the Mission of the Crusaders on the church at Vézelay, where in 1146 St. Bernard preached the second crusade and in 1190 Richard Coeur de Lion and Philip Augustus started for the Third. Katzenellenbogen suggests that the scene may have been designed by Peter the Venerable, the abbot of Cluny and former prior of the Abbey of Vézelay, "a great theologian who took a keen interest in the liberation of the Holy Land."

**Falconry in the Middle Ages.**—WILLIAM H. FORSYTH is led, by the recent gift to the Metropolitan Museum of two tapestries, to discuss, in *BMAA*, n.s. ii, 1944, pp. 253-259 (4 figs.), this "noblest" of mediaeval sports, and to bring together other examples in the possession of the Museum. An exhibition of hawking scenes was arranged at the Cloisters during the summer of 1944. A long account of the sport is given, specifying the different birds employed, its universality throughout Europe, and the impetus it received from the Crusades, as falconry had been practised in the Near East since the first millennium B.C. The two new tapestries represent, in the first, a gentleman and a lady, who holds a merlin on her wrist, while the gentleman dips a rod into a pool of water to entice the bird to bathe; in the other, a lady holding a smaller bird, perhaps a sparrow-hawk. It is known that falconry was extensively practised by ladies as well as men. These tapestries are dated by the costumes depicted at ca. 1420-1435, and were probably woven at Arras. Two other later tapestries, showing hawking scenes, dating in the late fifteenth or early sixteenth century, one, Flemish, from the Blumenthal collection, the other, Franco-Flemish, on loan to the Museum, are published for comparative purposes. A short bibliography concludes the article.

**Stained Glass.**—PAUL FRANKL publishes, in *Record Mus. Hist. Art, Princeton* iii, 1944, pp. 8-15 (8 figs.), four pieces of mediaeval stained glass in Princeton. The first is identified as having been made in Chartres, and dated ca. 1280. It is from the top of a window, and is by the same hand that

produced details in certain windows in Chartres Cathedral. The second and third pieces, which belong together, are identified as German, and date around 1360. They form the tops of window lights, and could have been adjacent parts of a double, or side lights of a triple, window. These pieces have been badly restored. The fourth piece, South German of 1515 or thereabouts, is the top of a Gothic window with cusps. It was obviously made under the influence of Peter Hemmel of Andlau, who introduced the use of trees and branches in stained glass, which are found in this example.

**Limoges Reliquary.**—The Museum of Historic Art at Princeton University has recently acquired a reliquary chest of Limoges champlevé enamel, which is published by W. FREDERICK STOHLMAN in *Record Mus. Hist. Art, Princeton* iii, 1944, pp. 5-7 (3 figs.). This is a good example of Limoges work, and is decorated with episodes from the Martyrdom of St. Stephen, a subject not often found on these objects. It is established that the plaques on the front of the chest are the work of two different men, but were made for this particular chest, as is proven by the assembly marks on the back, and points to the division of labor and large-scale production methods common in the enamel industry in the thirteenth century, to which period this example belongs.

**Miniatures from Lost Manuscript.**—Four miniatures from a collection of sixteen, formerly in a collection in England, are now in the Museum of Fine Arts in Boston. All are from the same manuscript. The examples in Boston are published by GEORG SWARZENSKI in *BMFA*, xlii, 1944, pp. 28-33 (5 figs., including cover illustration). The whole collection has been published in *Burl. Mag.* lxxxiv, 1944, p. 20 f., but the examples in Boston need additional comment. They represent The Annunciation to the Shepherds, The Betrayal, The Descent from the Cross, and The Entombment. The set is typical of an early Book of Hours. They are French, and to be dated about 1400. The style is based on the development started during the Regency of Charles V around 1375, but are also connected with works made for Duc Jean de Barry, brother of Charles V, and may possibly have been made for him, though this cannot be proven. The artist Jacquemart de Hesdin is suggested as the directing figure in their composition, but the miniatures are evidently the work of different hands, revealing the existence of a distinct atelier, the originality and inventiveness of which is striking. None of these miniatures repeats any



known composition from any other manuscript. Three artistic trends can be seen—(1) a correspondence in some cases with the "Great Book of Hours" known to come from the Hesdin atelier; (2) strong influence of Italian Trecento painting; (3) a link with the works of the Boucicaut Master. These three trends, and their combination with the Hesdin style, are a particular feature. A description of each miniature is given. Both in *The Annunciation to the Shepherds*, and in *The Betrayal*, strong Italian influence is notable, especially in the latter, where a Florentine miniature, of the same subject, also in Boston, is published for purposes of comparison. Only in *The Entombment*, a rare subject, do we find this influence superseded. The style of these and contemporary miniatures is the source from which the van Eycks drew, and was the result of a great concentration of artists.

**Bulbous Dome in Gothic.**—Pointing out that, up to the Gothic period, the bulbous dome was unknown in western and southern Europe, WOLFGANG BORN discusses in *Speculum* xix, 1944, pp. 208–221, its introduction and subsequent development. Cupolas of approximately onion-shaped form were first used in Venice as lanterns for the domes of St. Mark's, rising above the towering wooden shells which mask the low brick domes (not "stone domes," as Born declares) belonging to the original Byzantine fabric of the church. Although the date of the wooden shells and their bulbous lanterns is controversial, the author places their construction at the middle of the fifteenth century. The peculiar bulbous form, he shows, originating first in the Near East in wooden architecture, was gradually adapted to more monumental expression in Eastern Europe, the finials of Egyptian and Syrian minarets there serving as models for the bulbous cupolas which, in the second half of the fifteenth century, began to appear on Gothic spires of the Low Countries. Bulbous cupolas were developed in the sixteenth century to harbor carillons in Holland, and remained in favor during the seventeenth century. From Holland they spread to Germany in the sixteenth century, and since that time have remained a popular element in the architecture of central Europe, flourishing in the Baroque period and finally receding into the rural architecture of the Alps. From Russia also the bulbous dome spread to Germany, partly through the medium of the wooden architecture of the western Slavs and in part through commercial and military con-

tact. It thus appears that the use of the form in Germany and Austria was due to influences both from the west and from the east, i.e., from Holland and from Russia.

## RENAISSANCE

**Painting by Perea Master.**—Princeton has recently received the gift of a painting of the Last Communion of St. Mary Magdalene by this master, identified by Professor Chandler R. Post of Harvard. This painter is a Valencian, profoundly influenced by contemporary Flemish painting, who flourished about 1500. The scene is laid in a Gothic church, and the saint's head is uncovered. Another panel from this altarpiece is in a private collection in this country, and has been published by Post (F. J. M(ATHER, JR.), in *Record Mus. Hist. Art, Princeton* iii, 1944, pp. 3–4; fig.).

**Frescoes of Brancacci Chapel.**—In *The Art Bulletin* xxvi, 1944, pp. 175–187, FRANK JEWETT MATHER, JR., undertakes to prove "by purely historical evidence that it is highly unlikely that anything by Masolino is now visible in the Brancacci Chapel, hence that all frescoes not plainly by Filippino Lippi are by Masaccio." The author establishes the minimum lengths of time that it would take to paint the different frescoes. During the year 1423, when he painted in the Chapel, Masolino could not have painted more than the eight frescoes in the upper part. These are undoubtedly now hidden behind the Baroque ceiling that was built below the original Gothic vault.

**Porta dei Mesi at Ferrara.**—In *The Art Bulletin* xxvi, 1944, pp. 152–174, TRUDE KRAUTHEIMER-HESS presents a reconstruction of the Porta dei Mesi on the south side of the Cathedral at Ferrara, which was destroyed in the early part of the eighteenth century. Some fragments of the sculptural decoration are in the Museo dell'Opera del Duomo, and others have been found built into the cathedral. It had been thought that the whole structure was a homogeneous work of the thirteenth century, but the recently discovered pieces of twelfth-century work disprove this theory. Local Ferrarese tradition that the Porta dei Mesi was the work of the important North Italian sculptor Niccolò is proved true, through a comparison of the preserved fragments with his well-known works at Ferrara and Verona. The author then discusses Niccolò's style and its chronological development on the basis of this new evidence.

**Damage in Italy.**—An article in *The Sunday*



*Times* (London) for August 27, 1944, summarizes what was found of the condition of Italian works of art in the area between Rome and Florence. Much credit should be given to the Italian officials for carefully removing to places of safety many of the most valuable objects, principally, perhaps, to Vatican City. One of the most important storehouses, the Villa Gambia Castelli at Arceno, although in the combat zone, was saved from the Germans by the Italian guardian and eight British soldiers. In the Bishop's palace at Monsanello, another hiding-place, many priceless masterpieces escaped intact. Siena, Assisi, and Perugia are saved—Siena with but slight damage, Assisi absolutely intact. At Perugia, the Ponte San Giovanni was blown up, but the town and its works of art have suffered no harm. Cortona escaped with little but broken windows. Spoleto is virtually undamaged. Viterbo has suffered serious losses—Lorenzo da Viterbo's Marriage of the Virgin has perished, and most of his other frescoes there are either ruined or seriously damaged. Perugia's Baptism of Christ at Foligno has gone.

**German Thefts in Belgium.**—The *London Times* for November 13, 1944, gives a list of works of art formerly in the Church of Notre Dame at Bruges, that were stolen by the Germans while in Belgium. They include a marble group of the Virgin and Child by Michelangelo, and eleven paintings by well known masters. It has been known for some time that the famous work of the brothers Van Eyck, *The Mystic Lamb*, in the Cathedral of St. Bavon at Ghent, had been taken, and its present whereabouts is unknown.

**Brueghel in Stockholm.**—The famous painting by the elder Brueghel, belonging to the Naples Museum, representing The Parable of the Blind Men, is now reported (*London Times*, September 9, 1944) to have turned up in Stockholm, where it is offered for sale. Other missing Italian art treasures are also reported as being put up for sale in Switzerland.

### AMERICA

**Pottery from Oklahoma.**—The Southwest Museum has recently received a collection of ancient Indian pottery from La Flore County, Okla., which is most significant, as, barring the finds on Spiro Mound a few years ago, Oklahoma has been a blank spot on the archaeological map. It is described, and some specimens illustrated, by M. R. HARRINGTON in *The Masterkey* xviii, 1944, pp. 90–93 (fig.). It was from an ancient cemetery only five miles from Spiro, but the pottery and arti-

facts are quite different, and resemble Caddoan finds from southwestern Arkansas. Some of them have painted and engraved decorations applied after firing. The outstanding shape is a graceful water-bottle, of which a number of specimens are illustrated; next is a shouldered bowl with flat, sloping rim, usually with an engraved design; the rest are various forms of cooking pots and other utensils. Three pottery pipes are also included. Stone artifacts were rare in this site, but occur, and numerous bone and shell objects were found. It is impossible at present to state whether this cemetery was Caddoan, or merely influenced by the Caddo, and possessing similar arts.

**Monolithic Axe.**—M. R. HARRINGTON publishes, in *The Masterkey* xviii, 1944, p. 96 (fig.), a miniature model of an axe, 10 in. long, with a blade  $2\frac{1}{2}$  in. long with an edge of  $\frac{7}{8}$  in., of a hard, greenish stone, probably serpentine. It is said to have been found at Tasco, Guerrero, Mexico, and came to the Southwest Museum with the Rindge Collection. Such miniature celt-axes are extremely rare, and this specimen is the only example in the Museum.

**The Aleuts.**—Sergeant JEAN C. L'EMPEREUR, USA, recently on duty in the North Pacific area, gives a sympathetic description of the life of these prehistoric peoples in *The Masterkey* xviii, 1944, pp. 98–99. He describes the ruins of a *barabara*, that he discovered on the island of Amchitka, and the stone and bone artifacts noted in connection with it. The collections he was able to gather are now in the Southwest Museum (see *ibid.*, p. 94).

**Troubles at Zuni in 1702–03.**—Under this title, *The Masterkey* xviii, 1944, pp. 110–116, publishes a translation of a series of Spanish documents, concerning an uprising of the Zunis in the above period, ten years after the reconquest of New Mexico and Arizona by Diego de Vargas in 1692, with a number of explanatory notes by F. W. HODGE. At this time the Zunis combined with the Hopis to throw off the yoke of the white man. Much of the trouble seems to have been due to the cruel and licentious behavior of the Spanish soldiers. The priest at Zuni, Father Garaycochea, being much beloved by the people, was spared, and the church property respected, but a number of Spanish settlers were killed. The governor, Cubero, made no effort to co-operate with the priest, but on the contrary, removed him, and did nothing to settle the dispute.

**Tapestries of Colonial Peru.**—In *Brooklyn Mus. Journal* 1943–44, pp. 25–52 (15 pls.) NATHALIE



HERMAN ZIMMERN publishes an article on the post-Conquest tapestries of Peru, pointing out that for centuries before the coming of the Spaniards the textiles of Peru were of superb quality. The first person in the United States to recognize the importance of these later textiles was the late Denman W. Ross of Harvard, who made a collection of fine examples, now in the Museum of Fine Arts in Boston. The first sale of these objects as such in this country occurred in the Benguiat auction in New York in 1924, when six were sold, of which two have disappeared, two are in the Brooklyn Museum, and one and possibly another are in the Museum of the American Indian in New York. The writer has located fifty-seven examples in North American or European collections, which had previously been attributed to Europe or the Near East. A long historical account is given of pre-Conquest Peru (ca. 600-1530 A.D.) to give the background for the Colonial period. Another section is devoted to the Spanish conquerors, who in some cases married Inca ladies of rank. These conquerors brought with them, not only Spanish but, through the long period of Moorish occupation, Moorish influence, and through their Flemish and Dutch control, influences from those regions, as well as Italian. This is reflected in the textile industry of Spanish America. Textile factories were authorized in 1565, weaving became the great industry of Peru, and the textiles thus produced were unsurpassed in variety and quality. It is impossible to identify individual shops, although certain examples (enumerated) bear a strong family resemblance, and may come from the same factory. Factories multiplied quickly, and many tapestries and other textiles were made for ecclesiastical or domestic use. In the seventeenth century an attempt was made to improve working conditions but without much success. The growth of these factories was finally such that export of goods from Spain to the colonies was seriously affected, so that pressure was exerted in the mother country to have the industry restricted; the export of these goods from Peru to Spain was prohibited, and only raw materials were permitted to be exported. Through trade with the Philippines, Oriental influence begins to appear, as Chinese silks were much in demand. The annual fair for the sale and purchase of these wares from the East was at Acapulco in Western Mexico, and was of immense importance, attracting merchants from all over Spanish America. Chinese influence is strong in Peruvian tapes-

tries and textiles in the seventeenth and eighteenth centuries—a good example, of the earlier date, on loan to the Brooklyn Museum, is described and illustrated, as well as one from the Kelekian collection in New York, while other specimens in Washington and Boston are mentioned. The silk used in these tapestries was imported from China *via* Manila. In most instances the warp is cotton, the weft wool, to which silk or metallic thread is often added, or substituted, the wool used being generally alpaca or llama. Fusion of European with Indian ideas came rapidly, and the author suggests that many tapestries and textiles of the Colonial period are dated too late. This is particularly true in the quick adoption of Spanish dress by the Indians, which was made obligatory in 1572. A shirt in the American Museum of Natural History is published, dated in the sixteenth century, in which Spanish and Peruvian patterns are combined, while similar garments in Brooklyn and Boston are listed. Two mantles of the sixteenth century are published, one in the Museum of the American Indian, and one on loan to the Rhode Island School of Design in Providence, both of which are fine examples of the blending of Spanish and Indian styles. Others in the Cooper Union in New York are mentioned. Of tapestries made for the decoration of churches and homes, a superb example in Brooklyn and a fine piece in Boston are published, both belonging in the sixteenth century, while of seventeenth-century work, another example in Brooklyn, showing strong European influences, is published, together with one in the Mayorkas collection. In Brooklyn is also a unique cloth for a catafalque, which can be reasonably correctly dated in 1621, as it is decorated with a skeleton wearing a Royal crown, and another wearing a Papal tiara, and in 1621 occurred the deaths of King Philip III and Pope Paul V—the only time in history when a Spanish king and a Pope died in the same year. The article ends with a summary of the results obtained, five pages of notes to the text, and a comprehensive bibliography.

**Latin American Art.**—Under the title, "Remarks upon the History of Latin American Art," GEORGE KUBLER, in *College Art Journal* iii, pp. 148-152, presents a plea for the continuation, after the war, of studies in the Pre-Columbian and Colonial Art of Latin America. "There can be no question that an enduring concern with Latin American culture is a constant factor in the historical awareness of this country." Various



methods and techniques in teaching are suggested. The pith of the article is to be found in this quotation—"The justification for American archaeological studies resides in the fact that the American Indian culture developed without influence from the Old World. One infers that, if left to himself, man spontaneously develops culture. Ancient America is the only major world area in which the effects of this fundamental proposition may be tested."

#### FAR EAST

**French Indochina.**—*Smithsonian Institution, War Background Studies* xix, 1944 (28 pp., 25 pls., map) is devoted to an account of the peoples of this region by OLOV R. T. JANSE, of Harvard University, a former member of the *École Française d'Extrême Orient*. The opening sections consist of an Introduction, delimiting the country to be described, with its Geography, Climate, Hygiene, Natural Resources, Transportation and Harbors. For our readers, the important part begins with the Historical Background (p. 7 f). Chinese and Indian cultures began to be introduced into Indochina about the beginning of the Christian era. Chinese influence was predominant in Eastern Tonkin and Northern Annam; Indian especially in Southern Annam and Cambodia. The Chinese domination of Northern Indochina lasted till ca. 1000 A.D., when national dynasties began to rule the country, the most important of which were the Lé, Lý, and Tr'an. Although there was a brief Chinese rule subsequently, their influence during the last thousand years has been chiefly cultural, until the French protectorate was established in 1883-84. The Annamites, after gaining their independence, spread southward, conquering Southern Annam in 1471, and controlling portions of Cochin-China. Here they came into contact with the Khmers of Cambodia, and were in constant war with them. The Chams also played an important part in the ancient history of Indochina, controlling at one time a large part of the coast of Annam. In the second century A.D. they had established a state in Southeastern Annam, at Nhatrang. Marco Polo is believed to have visited this region at the end of the thirteenth century, but their civilization collapsed shortly afterwards, and sank into oblivion till the researches of French scholars brought to light many of their ancient monuments. Little is known of the origins and earliest history of the Khmers. They were profoundly influenced by India, if not of Indian

blood. Sanskrit was the court language, and Brahmanism the prevalent religion, although Buddhism was also practised. The ruins of Angkor and other sites in Cambodia testify to the high development of Khmer art, inspired by Indian sources, and date from the ninth to the thirteenth century, when the Siamese conquered the country, and dealt the death blow to Khmer civilization. The first European knowledge of this region came from Marco Polo. In the middle of the sixteenth century, missionaries and traders from Portugal, Spain, the Netherlands, France and England began to arrive in Indochina, of whom the best known was the French Jesuit Alexandre de Rhodes, who invented the transcription of the Annamite language still used today. Of the traders, the best known is also a Frenchman, Pierre Poivre, who travelled extensively there in the eighteenth century. The French were granted trading privileges by the Annamite king Gia-Long (1802-1820) but his successors failed to live up to the terms of the treaties, and began to persecute the Christians. As a result, a French and Spanish expeditionary force landed in 1858, defeating the Annamites, and causing the signing of a treaty in 1862 at Saigon, which ceded to France part of Cochin-China, which was completely occupied in 1867. The protectorate over Annam and Tonkin dates from 1883-84, while that over Cambodia, established in 1863, was united with the rest of the area in 1887. Additions were made in 1893 (Laos) 1899 (Kwangchow) and 1907 (Western Cambodia). The local kings of Annam and Cambodia still reign, but government is in French hands. The rest of the article describes the peoples of the region. The Annamites are numerically the most important, who are culturally and physically allied to the Chinese, and are probably the result of amalgamation of Chinese and Indonesian forbears. Their religion is a mixture of Taoism and Buddhism, though there are many Christians, mostly Roman Catholics. Cao-daiism, imported from Japan for political penetration, has about a million adherents. Next to the Annamites in importance are the Cambodians, who are assumed to be descended from the Khmers, but who have Thai and Chinese physical characteristics, and who are devout Buddhists. The Chams have dwindled from a once mighty people to about 100,000, divided in religion into two groups, Brahman and Moslem. The ruins of their ancient civilization, which reached its peak ca. 1000 A.D. have been uncovered by the *École Française*



d'Extrême Orient. In addition, there are Laotians of Thai stock, who are Buddhists, Chinese, who form a large proportion of the merchant class, and small numbers of Malays, Indians and Japanese. Finally there are numerous mountain tribes, mostly of Thai stock, but some, such as the semi-nomadic Man and Meo groups, are of Chinese origin. In the southern mountains are aboriginal Indonesians. In conclusion, the writer stresses the important geographical and strategic position of Indochina in the present war, and the benefits which have come to its people through the French protectorate, which will ultimately gradually give place to emancipation under Dominion status. A Selected Bibliography is added at the end.

**Culture in Indonesia.**—*Smithsonian Report* 1943, pp. 513-522 (12 pls.; map) prints an article by RAYMOND KENNEDY which originally appeared in *Far Eastern Quarterly* (Nov. 1942). Though primarily ethnological in its approach, this paper is of interest in that it deals with the Dutch East Indies and Borneo, and touches on their archaeology. This is an ancient area of human habitation, as is shown by the so-called Java Man. The tribes of the islands "now exhibit in their cultures virtually the entire range of civilization which have existed in the past." Certain of the nomadic tribes in Sumatra and Borneo still reflect a way of life which "is probably a fairly intact survival of general conditions in the archipelago 20,000 years ago," and each other tribe is worth studying, as its customs reveal early ways of life. Written records do not start till the Hindu period, which began about 1500 years ago, so life before that time can only be reconstructed by archaeology and legend. The Malays, however, were probably firmly established before 2000 B.C., when their last influx occurred. It is believed that the earliest inhabitants, going back before the dawn of history, were Negrito and Veddoid, of whom some traces remain, or Australoid and Oceanic Negroid, who early passed through on the way to Australia and Melanesia. At present the racial strains are Malay in two groups, earlier and later. The rest of the article deals with such ethnological factors as Languages, Economic Activities, Houses, Handicrafts, Social Organization, and Religion, but under Houses mention is made of ancient types, and megalithic remains throughout the archipelago, and that under Hindu influence stone workmanship reached its height in mediaeval Java. Under Religion it is made clear that even where Hinduism, Mohammedanism, and Chris-

tianity have affected the beliefs of the people, the ancient pagan cults persist, and color the more recently adopted religions. Hinduism is now most strongly preserved in Bali, while Mohammedanism has replaced it over nearly all of the remaining islands.

**Three Governors of Taoism.**—ALFRED SALMONY publishes, in *GBA.* ser. vi, xxv, 1944, pp. 315-317 (3 figs.) a most unusual bronze statuette, "without parallel among the photographically published antiquities of China," belonging to a private collection in San Francisco. A tapering band, and an upturned head of a fish provide a hollow base; in the fish's mouth is a snake, on whose neck sits a bird, probably a pheasant. It is to be dated in the T'ang period (618-906) although a design of a similar object, from the catalogue of bronzes owned by Ch'ien Lung is by the writer of the catalogue attributed to the Han period (206 B.C.-220 A.D.) and identified as a staff-finial. This attribution to the Han period is to be rejected. The symbolism of the object is not to be found in the Buddhist repertory, but can be explained by the study of Taoism, as representing the three governors of heaven, earth, and water. It is known that the T'ang rulers, especially in the early part of the period, were much inclined towards Taoism, and that adds cumulative evidence to that of technique. The function of the object doubtless had something to do with the curing of diseases.

**Tibetan Painting, Freer Gallery.**—In *GBA.* ser. vi, xxv, 1944, pp. 283-298 (8 figs.) SCHUYLER CAMMANN publishes a painting in the Freer Gallery representing the Paradise of Bhaisajyaguru, the Buddha of Medicine. Tibetan paintings fall into two groups—mandalas (rigidly prescribed diagrams) and less stereotyped pictures of figures or groups, including scenes such as the painting here described. This paradise is situated in the remote eastern heavens, as opposed to Amitabha (Buddha of Boundless Life) in the west. Representations of Amitabha are relatively popular, and are most frequent in Tibetan painting. The subject of this painting is rare, only four examples being known to the author outside Tibet, of which the one in the Freer Gallery is the finest. Tibetan painters have always been rigidly limited in composition by tradition, only color and general background or setting details being left to their discretion; but even here, only two types of scenery might be used, the naturalistic or the architectural. The Freer painting has a naturalistic background,



with, however, some architectural characteristics. The painting, with its central Buddha and attendant Buddhas, Bodhisatvas, and lesser divinities is carefully described, and illustrated, both complete and in details. The technical processes and religious background of the composition are also thoroughly explained. The seven lesser Buddhas shown with the figure are believed to be the seven emanations or manifestations of the Buddha of Medicine, Bhaisajyaguru. Each Buddha has a pair of Bodhisatva attendants, while the principal Buddha has twenty-eight lesser attendants. Of these, twelve are identified as marshals of the demon race of Yakshas, another twelve as twelve Hindu deities (eleven gods and one goddess) representing the Devas, whom the author names and describes, and who represent the Universe in microcosm, while the other four are the Four Great Kings of Heaven. As a result of this description, the author shows that the idea represented by the picture is that of the divine spirit of Healing. No date for this painting is assigned, other than calling it Lamaist—but it is by no means a modern work. A footnote at the end of the article stresses the necessity of collectors being on the lookout for forgeries, of which there are a large number in the market.

**Chinese Porcelains in England.**—In *B.M.A.* n.s. ii, 1944, pp. 266–272 (6 figs.) LOUISE AVERY publishes a group of Chinese porcelains of the Wan Li period (1573–1619) recently acquired by the Metropolitan Museum from the J. P. Morgan estate. Four of these pieces belonged to William Cecil, Lord Burghley, Lord Treasurer under Queen Elizabeth. All are furnished with contemporary English silver-gilt mounts, dated by hall-mark at about 1585. An account of the career of Lord Burghley is given. The most interesting part of the article, from the archaeologist's point of view, is the discussion of how these porcelains reached England. Much was brought to Europe through the Red Sea and Persian Gulf, thence by caravan to the Mediterranean. For a long time Venice held the monopoly of this trade, but as early as 1581 the English had been granted trading privileges in Constantinople, and had founded the English Levant Company. The Portuguese were trading with China by direct overseas route round the Cape of Good Hope. In these ways much Chinese porcelain reached England, but its rarity was still such that it was often embellished by such mountings as appear on these examples. The porcelain is blue and white, and of excellent quality. The rest

of the article deals with a discussion of English silversmith's work of the period, which was much under French, Dutch, and German influence, particularly the latter, as the Hanseatic League had established a settlement in London as early as the middle of the thirteenth century, and enjoyed special trading privileges, which, however, were withdrawn in 1598—after the date of this silver. Very few examples of this mounted ware survive. These pieces remained in the Burghley family till 1888, when they were sold at Christie's. In 1890 they belonged to the dealer William Agnew, but the elder J. P. Morgan had acquired them some time between 1895 and 1906.

### U.S.S.R.

**Black Sea Region.**—The State Historical Museum in Moscow published *Trudy Gosudarstvennogo Istoricheskogo Muzeia*, vyp. xvi: "Trudy Arkheologicheskikh Ekspeditsii" during 1943 which includes two longer reports of the excavations of Graeco-Roman and early mediaeval sites; in addition there are two papers on the Saian Altai Expedition, 1935. The most valuable contribution is the first of a series of definitive reports by V. D. BLAVATSKII ("Otchet o Raskopkakh Fanagorii v, 1936–1937 g.," *op. cit.*, pp. 5–74) on the large-scale excavations at Phanagoria on the Black Sea begun by the State Historical Museum in 1936 and continued until the eve of the War.

During the season of 1936–1937, the excavations on the Black Sea littoral were conducted by a large Expedition jointly with the Museum of Pictorial Arts (Muzei Izobrazitelnykh Iskusstv Imeni A. S. Pushkina). The work was carried on near the seashore at the northwestern edge of the vast site where "City A" and "Necropolises A, B, and C" were excavated. Within "City A," an area on the outskirts of the city, it was possible to trace the development from the Archaic periods to the Middle Ages. "Necropolis A," adjoining, was a mediaeval tomb site. Hills "B" and "C," south and southwest from the edge of the city, contained two of the many cemeteries. The former was not completely excavated until 1938; the latter was filled with the lower-class burials of the Roman period. Within the "City A" area sixteen 5 x 5 m. squares lying on a bluff 6–8 m. above the seashore were excavated. Ten strata, totalling 4.75 m. in thickness, were attributed to the period from the sixth century B.C. to the thirteenth century A.D.

The principal objectives were: (a) establishing



the boundaries of the city; (b) determining the period and character of the cultural strata; and (c) to investigate the necropolis.

The northwestern coastal area was first selected mainly because it was particularly threatened by sea damage and slides. The following ten cultural strata were identified: 1. Ca. fifth-thirteenth century A.D. 2. Fourth-fifth century A.D. 3. Third-fourth century A.D. 4. Second-third century A.D. 5. End of first century B.C.-first century A.D. 6. End of second-first century B.C. 7. Second century B.C. 8. End of fourth-beginning of second century B.C. 9. End of fifth-fourth century B.C. 10. End of sixth-fifth century B.C.

The historical outline can thus be summarized. The first traces of the Greek colonists appear during the late "Archaic" and the beginning of the Classical Periods (tenth level). No monumental structures nor any architectural structures of any type are encountered during these periods, although the area abounds in potsherds, the explanation being that the excavated area during this earliest period was an empty lot. During the Classical Period (ninth level) the first structures appear: these are a clay hearth, an unbaked brick "bath tub" and excellent gravel floors—all testifying to the high development of building art in Phanagoria during this period. The end of the Classical Period, particularly the Hellenistic epoch (eighth-sixth levels) is distinguished by the flourishing building activity upon this area. A large public building was undoubtedly a significant monument of Hellenistic building craft in the northern Black Sea area. This building had been twice rebuilt. Here also came to light a small cistern and fragments of painted wall plaster recovered from a later structure. These testify to the high level of architectural art, and richness of interior decorations. The Roman epoch (fifth level) was a period of decline for this section of the city. Nevertheless, here were found a very substantial pavement, and a series of apartments with cement floors which had been made from the remnants of far more artistic building of the earlier period, being constructed of poorly dressed stone intermingled with well-dressed slabs, retaining the traces of decoration and paint. The later strata were found to be but miserable ruins. The city vanished during the thirteenth century; the "A" area had become impoverished and relatively deserted.

Necropolis "A," attributed to the late Roman-early Mediaeval period, included a monumental

well, which yielded a marble figurine, probably of enthroned Cybele, and many fragments of amphorae belonging to the third to the fifth centuries A.D. Of especial interest was a semi-transparent flat blue glass bead, decorated with the head of Dionysos on one side and of Silenus on the other. In Necropolis "C" some seventy-three tombs have been excavated. Most of these contained coffinless dorsal unflexed burials. The orientation varied, although north, northeast and southeast predominated. The inventories varied greatly. There were several children's burials in amphorae, one in an urn, and several in coffins or without coffins. While the greater part of the burials contained little or no grave furniture, a few contained relatively rich collections of pottery, glass, ornaments, weapons, etc. Some graves contained skeletons of animals, such as dogs and horses, buried with their masters. In one instance an artificially deformed skull was found, and elsewhere pottery of local manufacture was included, all these finds indicating the presence of aboriginal elements in Phanagoria. The bulk of the objects from this Necropolis were attributed to the first to the third century A.D.

Suvar, probably the capital of the Bulgarian State on the lower Volga River, was well known from Arabic literary sources between the tenth and fourteenth centuries when it disappears from view. The site of Suvar was only identified in 1914 by P. Akhmarov. This was a very large square site, approximately 4.5 km. in circumference, located on the Utka River in Baichikhinski District of the Tatar ASSR. These large-scale excavations were conducted by the Moscow Branch of GAIMK jointly with the State Historical Museum from 1933 to 1937. The present Report by A. P. SMIRNOV ("Suvar: itogi raskopok 1933-1937 g.," *op. cit.*, pp. 135-171) summarizes five years' work at the site.

The Expedition explored the fortifications and hills in the center of the city, in the hope of discovering the famous mosque mentioned by the Arab historians, and also explored the outskirts of the area yielding materials illustrating the life of the citizenry. Fortifications, dwellings and economic structures (grain storage pits) have been studied.

Of especial interest was a brick palace located in the center of the site; this palace existed from the tenth to the fourteenth century, when it was burned down, probably at the time of the final destruction of the city. Many coins and large quantities of pottery, glass, and metal were found.



The greater part of the objects, including the glass, belonged in the pre-Mongolian epoch, indicating that the city then flourished, but had lost its economic significance after 1236. The decline of the city was due to the change of an important caravan route between the Volga and Central Asia.

**Altai Region.**—EVTIUKHOVA and KISELEV continued publication of the results obtained by the Saian Altaian Expedition. The two current studies (L. A. Evtiukhova and S. V. Kiselev, "Otchet o rabotakh Saiano Altaiskoi ekspeditsii v 1935 g.," *op. cit.*, pp. 75–118; L. A. Evtiukhova, "Kamennye izvaianiia Severnogo Altaia," *op. cit.*, pp. 119–134) are devoted to the excavations in 1935, and to the stone statues of the northern Altai. The Report is concerned with the description of the burial structures on the Kurai steppe forming a continuous series from the Bronze Age to the ninth century A.D.

**Recent Publications.**—During the War years an important series of archaeological publications was started by the Institute for the History of Material Culture. This series is entitled *Materialy i issledovaniia po arkheologii SSSR* (Archaeological Materials and Investigations of the USSR), abbreviated *MIA SSSR*. Only the first of several volumes has reached us ("Arkheologicheskie pamiatniki Urala i Prikam'ia, pod redaktsiei P. N. Tret'iakova," *MIA SSSR*, No. 1 (Moscow, 1940)). This is a series of articles on the archaeol-

ogy of the Urals and the Kama Region containing contributions by: N. A. Prokoshev, "Neolithic monuments of the Uralian-Kama Region" and "Prehistoric Settlements near Turbino"; D. N. Eding, "New finds from the peat marsh of Gorbunovo"; K. V. Salnikov, "Andronovo tumulus burials near Fedorovka Village, Chelyabinsk Oblast" and "Sarmatian tumuli near Orsk"; G. V. Podgaetskii, "Bronze Epoch Cemetery near Orsk"; A. V. Zbrueva, "Galkino Gorodishche" and "Svinogorskoe Gorodishche"; L. A. Matsulevich, "Byzantine Antiquities in the Kama Region"; and M. V. Talitskii, "Kochergino Cemetery."

The following other volumes of the *MIA SSSR* are known to have been issued:

- No. 3. "Materials on the Archaeology of Kabardino-Balkaria."
- No. 5. P. N. Tretiakov, "A contribution to the History of the Tribes of the Upper Volga during the first millennium A.D.," 1941.
- No. 6. "Ethnogenesis of the Slavs," 1941.  
"Palaeolithic and Neolithic Periods in the USSR," 1941.  
"Archaeological Monuments of the Bosphorus and Chersonesus," 1941.

No further volumes either of this series or the "Brief Reports" seem to have been issued after 1941.



## BOOK REVIEWS

WARS OF THE IROQUOIS, by *George T. Hunt*. Pp. 209, map. University of Wisconsin Press, Madison, 1940. \$3.00.

In this volume Professor Hunt presents a careful study of the wars waged by the Iroquois during the seventeenth century, when these confederated tribes rose to power as the scourge of north-eastern North America. He rejects such theses as that of Parkman, who maintained that the Iroquois were powerful because of an "insensate fury," or that of Lewis H. Morgan, who claimed that the Iroquois' superior political organization and intellect made them invincible, or that which attributes Iroquois greatness to an unusually powerful armament supplied them by the Dutch West India Company. Hunt points out that native ability, abetted and stimulated by conditions arising from the development of the European fur trade, enabled the Iroquois successfully to wage wars for economic and political power on the white man's basis, as opposed to the Indian foray to win individual prestige.

Hunt's book will be a most useful addition to the literature on these extraordinary tribes who for so many years occupied an important place in the history of eastern North America. During the seventeenth and eighteenth centuries, they perhaps more than any Indian groups in North or South America were able to handle both white and international politics to forward their own ends.

The purpose of Hunt's book is not to describe the cultural history of the Iroquois, so that he should not be adversely criticized for not developing more fully the archaeological and sociological aspects of these tribes. In fact, he seeks to repair various deficiencies in the anthropological studies of the Iroquois by a close historical analysis of Iroquois activity.

*The Wars of the Iroquois* is well documented, and should be of great use to the professional historian dealing primarily with the American colonial era, and in addition, from the deep and careful study which it represents, should implement archaeological research in providing leads based on archival data.

The Iroquois have been made the subject of a larger bibliography, ranging through various disciplines, such as sociology, ethnology, archaeology, and history. There are few Indian tribes which can

be studied so fruitfully from so many points of view. Hunt's study demonstrates that the Iroquois, in addition to their archaeological remains, are fortified by a historical record in French and English second to none in North America. Furthermore, the Iroquois have been under white scrutiny for a longer time than almost any other Indian group, not excepting the Aztecs and the Incas, so that the student is not thwarted by the lack of written records to supplement archaeological data. One hopes Professor Hunt will go on to expand his studies on this most interesting phase of American history, since relatively little has been published recently on inter-tribal impacts under the compulsion of the white penetration into eastern North America.

THE UNIVERSITY MUSEUM GEORGE C. VAILLANT  
PHILADELPHIA, PA.

THE HOME LIFE OF THE ANCIENT EGYPTIANS, A PICTURE BOOK, by *Nora E. Scott*. Pp. 30, ill. 35. The Metropolitan Museum of Art, New York, 1944. \$.25.

This is another of the handsome and useful picture books published by the Metropolitan Museum. The thirty-five illustrations reproduce objects in the Museum. They are very clear and often show a number of objects tastefully arranged, thus giving a good survey of Egyptian home life. The different chapters deal with the family, house, housekeeping, furniture, tableware, toilet and dress, games and toys, music and dancing. The text is rather short, but precise and lucid. The only criticism the reviewer would like to make is that of the motto which cites the often repeated verse from Ecclesiastes that there is nothing new in the world. Pots, tables, cosmetics, etc., are still used in our times, it is true, but electric light, refrigerators and other inventions have changed our lives considerably. It hardly improves our understanding of the ancients, if we neglect the differences which separate us from them.

BRYN MAWR COLLEGE VALENTINE MÜLLER

THE BABYLONIAN COLLECTION OF THE UNIVERSITY MUSEUM, by *Leon Legrain*. University Museum Bulletin, Vol. X, Nos. 3-4. Pp. 78. The University Museum, University of Pennsylvania, Philadelphia, 1944. \$1.00.



The praiseworthy custom of publishing popular guides has been very well fulfilled by the author for the Babylonian Collection of the University Museum at Philadelphia. The text is well adapted to the purpose of a guide. It is rather short, but gives the most important points in a clear and precise style which lacks, however, the sparkling quality which we enjoy in other writings of the author. It starts by reminding the reader of the illustrious role which Philadelphia has played and is still playing in the Oriental studies of this country. The Oriental Collection of the University Museum is the oldest of its kind in the country and the very nucleus around which the Museum was built. As an illustration, letters describing the early study of an Assyrian relief sent from Mosul to Philadelphia in 1853 are reprinted. A description of excavations, undertaken by the Museum at Nippur and Ur, precedes a survey in short chapters of the history of Mesopotamia from the Al Ubaid to the Sassanian period, always well illustrated by a selected number of objects on exhibit in the Museum. Other chapters on the Nippur Seal and Terracotta Collections, Nuzi, Tepe Gawra and Tell Billa, Palmyra, the Luristan Bronzes and the Sabaean Collection show the wide range of material in the Museum.

It goes without saying, in view of the scholarly rank of the author, that the given facts are well authenticated. The reviewer feels compelled, however, to call attention to some inconsistencies. It is true that the absolute chronology of the earlier periods is not settled with certainty, but it seems curious to find Sargon of Agade dated in the chronological table ca. 2750 B.C., on p. 34 at 2650 B.C. and on p. 51 at 2600 B.C. On p. 35 the author seems to imply that the Sumerians developed their high culture in their homeland which he thinks was Elam and brought it by sea into Mesopotamia where they found the much cruder culture of reed huts and painted pottery, whereas he speaks on p. 51 of the *origin* and progress of Sumerian culture in southern Mesopotamia. But such subtleties do not impair the value of the useful guide.

BRYN MAWR COLLEGE VALENTINE MÜLLER

RUINED CITIES OF IRAQ, by *Seton Lloyd*. Second edition. Pp. 80, figs. 27, maps 2. Humphrey Milford, Oxford University Press, London, 1943. \$1.25.

This guide, issued for the Iraq Government for British troops, is an encouraging sign of the

times, because it shows the interest of the soldiers in the antiquities of the countries to which they go and the enlightened attitude of the Iraq Government. The choice of the author is very fortunate, because Lloyd has an excellent knowledge of the country and of the ruins. He gives a good description of the sites and their history, and practical advice on the roads which lead to them, as well as suggestions as to the best manner of looking at the sites. Illustrations in the form of photographs showing the present appearance of the cities; groundplans and reconstructions, are a great help to the visitor. The following sites are dealt with: Old Baghdad, Babylon, Ctesiphon, Al'Ukhaidir, Samarra, Hatra, Nineveh, Khor-sabad, Bavian and the Jerwan Aqueduct, Ur. A sketch of Iraq's history, a bibliography, a list of the Museums of Baghdad and a map of the town follow.

The reviewer feels compelled to comment on a very few points only. "Seventh" century on p. 5 is apparently a misprint, because Mansur founded the circular city in 762 A.D. The statement that it was "built on the plan of a Roman camp" is somewhat puzzling, because Roman camps were angular. A connection of the façade at Ctesiphon with the much older *iwans* of Sinjirli, as pointed out by Oelmann (*Bonner Jahrb.* 127, pp. 217 ff.) seems more likely to the reviewer than a new Parthian creation in imitation of the hair-tents of the nomads. He also would not call it a "masterpiece of bad taste," because he believes such evaluations should be avoided (cf. D. W. Prall, *Aesthetic Analysis*, pp. 172 ff.) and that it is better to try to understand the principles of a foreign art than to impose our own standards upon it.

BRYN MAWR COLLEGE VALENTINE MÜLLER

THE HEARST HYDRIA, AN ATTIC FOOTNOTE TO CORINTHIAN HISTORY, by *H. R. W. Smith*. Pp. 241-290, pls. 33-37. (University of California Publications in Classical Archaeology Volume 1, No. 10.) University of California Press, Berkeley and Los Angeles, 1944.

This interesting pamphlet is divided into two parts—a detailed publication of an Attic hydria in the collection of Mr. William Randolph Hearst at San Simeon, and a discussion of the dates of the Kypselids.

The first part is an important contribution to our knowledge of Attic pottery of the first half and the middle of the sixth century. By a minute stylistic analysis and by comparisons with vases



which may be dated on outside evidence—namely the Arkesilas vase in Paris and the Panathenaic amphora in Halle—the author is able to assign the Hearst vase to the decade 560–550 B.C. As the date is arrived at without the help of obvious late Corinthian I parallels, Mr. Smith's findings confirm Payne's dating of that ware in the second quarter of the sixth century.

From this premise the author with his usual originality and thoroughness proceeds to the knotty problem of the dates of the tyrants of Corinth. Should we accept the Herodotean date of about 550 for the fall of the Kypselids or the Apollodoran one of 584? Beloch's arguments for a downward revision of the dates of Kypselos and Periander have not been accepted by many modern historians—Wade-Gery, for instance, or Schachermeyr. Payne in his *Necrocorinthia* was "inclined to prefer the earlier date." A review of the problem was therefore in order.

The evidence is exceedingly complex. Not only do the ancient writers contradict one another but the historical evidence which can be brought to bear on the question—the decline of Corinth's eastward trade, the rise of Samos to a formidable power, the relation of Corinth to Coreyra and the West—is far from clear. Mr. Smith skilfully leads us through this labyrinthine maze, discusses each pertinent argument, and comes to the conclusion that the lower dating must be the correct one. In other words, the fall of the Kypselids in 550 must be held responsible for the sudden end of Corinthian black-figure, for the rise of Chalcidian ware at that time, and for the upward sweep of Attic ware. To an archaeologist this would seem an attractive solution.

In spite of the minutiae of the argument the pamphlet is good reading. The style is vivacious and individual. And the one hundred ninety-eight notes include many stimulating suggestions.

A few comments and queries: Does not the rendering of the drapery in the statue of Aeakes point to a date rather later than 540 B.C.? (Compare British Museum B280). Do we know that the wooden tablets from near Sikyon are the work of a Corinthian artist? The letters of the inscription could be Sikyonian as well as Corinthian and "Korinthios" could also apply to a dedicatory. The scales seem now rather heavily weighted against Rumpf's theory that Lydos=Sakonides. Mr. Smith's note 5 gives cogent reasons for hesitating to accept the equation. To the reviewer the fundamental reason against it is that the facial

type in the signed works by Sakonides, especially on the cup in the Fitzwilliam Museum, does not tally with that of Lydos.

THE METROPOLITAN MUSEUM OF ART  
GISELA M. A. RICHTER

CORPUS VASORUM ANTIQVORVM, U. S. A., FASCICULE 10, SAN FRANCISCO, FASCICULE 1. M. H. DE YOUNG MEMORIAL MUSEUM AND CALIFORNIA PALACE OF THE LEGION OF HONOR, SAN FRANCISCO, by H. R. W. Smith. Pp. 57, pls. xxx. Harvard University Press, Cambridge, Massachusetts, 1943. \$5.00.

The considerable delay in the appearance of this review is due to the fact that the archaeologist to whom the task of reviewing the book was first assigned had to go overseas before accomplishing her task.

Professor Smith's fascicule on the vases in San Francisco covers a wide range—Mycenaean, Geometric, Cypriote, Corinthian, "Halys Theriomorphic," Etruscan, and Attic black-figure and red-figure. There are no "capital" pieces among the vases, but many are important and attractive. The following are perhaps the most interesting: a stemless band-cup with neatly drawn lions, a late black-figured amphora with Ajax and Odysseus, a hydria with a dainty picture of Apollo and Artemis by the Pan Painter, and a pelike of about 400 B.C. with Artemis, Apollo, Aphrodite, and Hermes.

The chief value of this book, however, is Mr. Smith's scholarly, detailed, stimulating text, and his excellent illustrations. We are happily far removed from the days of the early fascicules of the *Corpus* when the vases were presented in small, inadequate pictures, with only a short descriptive text and hardly any discussions. Henceforth, catalogues of vases will no longer be necessary, since the *CVA* can fill all legitimate needs; at least Mr. Smith in this and in his other admirable fascicules has shown that it can.

Some of the examples in the Young Memorial Museum and the Palace of the Legion of Honor of San Francisco were known before, others were not. Mr. Smith has been able to make new attributions and interpretations of great value. Many major and minor problems are attacked with understanding and ingenuity and, if not always solved, are at least brought nearer to a solution. I have learned much from a reading of the text. A few queries and remarks on minor points occur to me:



If the bearded man on the neck amphora, pl. v, 1 b, were indeed intended for Polykrates, would one not in this period expect an identifying inscription (as in the case of Anakreon, for instance)? The Lysippides Painter has now been identified by Beazley with the Andokides Painter. Is not the *Lasur* or "lustrous film of glaze" which the author has diagnosed on several vases (cf. pp. 31, 32, 33, 34) merely a polish of the surface? (see my remarks in Richter and Hall, *Red-figured Athenian Vases*, p. xxxvii, note 68). It would be quite easy, I think, to remove an accessory red without dislodging the underlying black glaze, provided the latter were dry (p. 23). The "change in the form of the chair" by the addition of an upright in the middle of the back (p. 41) is of course merely a more naturalistic representation of the familiar klismos. The "slip of drawing" in supplying a downward tilted oinochoe with a profile foot (p. 43, pl. xxi, 1 a) is the usual rendering at this time (cf. e.g. pl. xxii, 1 b).

Mr. Smith has had conscientiously and laboriously to point out the modern restorations on some of the vases. One may hope that soon every Museum curator will make it his business to have all modern repainting removed from the vases in his charge before their inclusion in the *Corpus*.  
 METROPOLITAN MUSEUM OF ART  
 GISELA M. A. RICHTER

A HANDBOOK OF GREEK AND ROMAN ARCHITECTURE, by D. S. Robertson. Pp. xxvi+407, figs. 135, pls. xxiv. 2nd Edition, 1943. Cambridge, at the University Press; New York, The Macmillan Co. \$7.50.

A further debt of gratitude is owed Professor Robertson for the second edition of the excellent work already well known. Its real usefulness called for a new edition even at a time when, unfortunately, the complete revision the author wished was impossible. In spite of the severe limitations imposed, he has succeeded admirably in bringing the work up to date. "I have reluctantly left the illustrations unchanged, but I have tried to revise the whole text and the Chronological Tables in the light of recent research. I have made a great many substantial changes and I have justified these, where necessary, by additional footnotes." In fact, much of the new material could only be noted briefly with bibliographical reference in footnotes, since what changes were made in the text apparently had to be limited to such as would not alter more than a page or two of the

original setting and in no way enlarge it. For this reason, although many corrections were possible in the text (e.g. accounts of Troy, Tiryns, Olympia Heraion, Samos Heraion, Argive Heraion model, Pharos of Alexandria, Temple of Bel at Palmyra, and numerous dates), additions of new material suffer by the restriction to brief mention in notes. The early chapters suffer most from this inability of the author to rewrite, since many new and significant early temples (e.g. Perachora, Dreros, Larisa, Lucanian Heraion) and studies of details of structure and decoration (vaults, mouldings) have to be either omitted or cited merely by title. The chapter on Houses, too, needs substantial changes since the Olynthus volumes have appeared.

The extensive work of recent years on chronology has, however, been incorporated in the thorough revision of the very valuable Chronological Tables and where possible in the text; a considerable number of new buildings has also been added to the Tables. Since it was not feasible to revise the Bibliography, page references are added to places where new bibliography is cited in notes. The author reminds us in his preface that "new bibliographical matter is mostly confined to buildings and subjects discussed in the text, and that for things mentioned only in the Bibliography and the Chronological Tables (and also for some things in the text, especially in the Roman sections) students will in general be wise to search the periodicals of the last twelve years for themselves." The parenthesis explains, no doubt, such striking omissions as E. Baldwin Smith and Dinsmoor on the gable roof of the megaron (*AJA* xlv, 1942, pp. 99-118, 370-372), Pernier on Prinias (*AJA* xxxviii, 1934, pp. 171-177); Dinsmoor on the date of the Older Parthenon (*AJA* xxxviii, 1934, pp. 408-448; xxxix, 1935, pp. 508-9; *JdI* li, 1937, pp. 3-13); Dörpfeld (*AJA* xxxix, 1935, pp. 497-507; *JdI* li, 1937, pp. 14-16) and Kolbe (*JdI* li, 1936, pp. 1-64) on the same; Dinsmoor on the original designs of the Erechtheion (*AJA* xxxvi, 1932, pp. 307-326), on the Hephaisteion (*Hesperia*, Suppl. v.), D. B. Thompson on the Hephaisteion (*Hesperia* VI, 1937, pp. 396-425); *Corinth* Vol. I for the Temple of Apollo at Corinth; Agnes Lake Michels on the Tuscan temple (*MAAR* xii, 1935, pp. 89-149) and on the pediment of the early Italic temple (*AJA* xlv, 1941, pp. 71-72); Van Deman on aqueducts (*The Building of the Roman Aqueducts*, 1934).



It will only be possible to note a few of the interesting new points to give some idea of their value. Wace's new discoveries of second-storey columns on the façade of the Treasury of Atreus were made in time to get into a postscript in the Preface. Mention of Wace's private discussion with the author of his doubt of the architectural character of the much debated s-c Metope (sculptured) from Mycenae makes one eager for his evidence. We should have been glad for the author's evidence for assigning the invention of the Composite capital to the Augustan period. It is good to have his confirmation, from personal observation, that the vaults of the Stabian Baths at Pompeii are concrete (stone being claimed by some as the material). One is inclined to agree with his doubts that the side door entrance arrangement of the Temple of Bel at Palmyra can be original as claimed by Schulz. Many will also agree with the author in preferring to stress the influence of the *Thermae* of Rome on the Basilica of Maxentius rather than to follow the suggestion of an old Italic market building-complex as the origin. He is surely right in believing that the formerly accepted dates for the Selinus temples are too early, and one sympathizes with his difficulty in fixing others; he does well to offer no new ones until evidence from recent and current investigation is available as a firm basis (one suspects they may have to come down two or three decades). Of the Poseidon temple at Paestum he says "usually placed later than the Parthenon . . . but it may well belong rather to the first half of the fifth century;" at least two unpublished investigations seem to confirm a date roughly contemporary with the temple of Zeus at Olympia. The date 450-440 for the Hephaisteion is accepted, but the exact new dates proposed by Dinsmoor for it, Sounion, and Rhamnous are recorded with a question mark and Rhamnous is kept between the other two in the Table. It may be noted here that re-examination of the mouldings of these temples tends to confirm Dinsmoor's order, putting Sounion between the other two. The Temple of Ares in the Agora is not listed. Bassae is kept at 420 in the Table, but the text notes record the possibility of some portions being earlier. Von Gerkan's later date for Hermogenes is accepted. The Nîmes amphitheater is retained as Augustan; the Khazna at Petra is now listed as ca. 120 A.D. or earlier, following the tendency to put it in the first c. A.D.; it is noted that A. W. Lawrence thinks the temple at Olba may be as

early as the time of Alexander; The Temple of Rome and Augustus at Ancyra is tentatively put back into the second half of the second century B.C. as Krencker and Schede maintain, rightly or wrongly. Many other dates are adjusted convincingly.

One hesitates to ask for more when so much is given and especially when one realizes the serious limitations imposed upon the author, but perhaps a few questions may be posed. That "the hawksbeak was probably invented in terracotta gutters" (p. 38) is surely open to question; the numerous early stone forms which illustrate the several lines of attack on the cavetto in the direction of the full-fledged hawksbeak offer other equally strong possibilities of origin. It seems more likely that the cyma recta and the hawksbeak both developed more or less simultaneously from the cavetto, not one from the other. The distinction which the author sees between Attic and Asiatic forms of cyma reversa and ovolo and their ornaments (pp. 38 and 39) needs further proof, this reviewer feels; does not moulding evidence suggest that the distinctions are chronological rather than geographical (save in rare exceptions)? It is hardly accurate to say that the opisthodomos is "confined to buildings with a surrounding colonnade" (p. 39); amphiprostyle buildings are not by any means unknown. The description of the Ionic order gives no indication of the variation in the types of mouldings used for given positions. It is good not to find color neglected, but one is disappointed not to get some suggestion of the principles that regulate the use of color in Greek architecture.

It is a pleasure to see the "bold experiment" of the Paestum architects noted with appreciation. The unusual "heavy" mouldings are carefully recorded, but one regrets that Robertson did not go further to indicate their Ionic character and so to emphasize the real fusion of Doric and Ionic elements which is the essence of Paestan architectural style. "Nothing preserved above the architraves" said of the Corinth Temple of Apollo needs amendment to "nothing preserved *in situ*," since the publication of triglyph and mutule guttae fragments in *Corinth* Vol. 1. The indications of an earlier Temple of Nike, discovered by Balanos in the course of strengthening the bastion, had not been available to the author. One misses, too, any notice of Dinsmoor's theory of the original designs of the Erechtheion, and hazards the guess that had they been con-



sidered the author might not find it so difficult to believe that Mnesikles was the architect. To some, at least, Mnesikles, genius in originality and unbounded optimist, is one of the most clear-cut architectural personalities. On the question of the origin of the Corinthian capital, also, another view might be taken. To Robertson "the early history of the Corinthian capital does not suggest that dissatisfaction with the Ionic corner capital had much to do with its invention." But surely both the earliest forms known to us and the circumstances of their use (at Bassae and at the Tholos at Delphi) suggest very forcibly that the inadequacy of the corner Ionic capital, especially for interior use, demanded an improvement along the very lines followed by the beginning stages of the Corinthian type.

A minor point about the Heraion of Argos: why is it mentioned on p. 115 as fourth century Doric when it appears quite rightly in the Chronological Table as ca. 410 B.C. and is late fifth century in style. In regard to the Temple of Athena at Pergamon, "usually assigned to the fourth century B.C. . . it is doubtful if it can be earlier than 300 B.C." says Robertson rightly, for it is probably considerably later. It has been mentioned above that the chapter on Houses needs revision in the light of the Olynthus material. May we hope, too, that the Delos houses may come out a bit less forlorn in the next edition; are they really "largely poor and crowded"?

It is by no means, however, the remarkably few omissions or the occasional differences of opinion which characterize this book in the minds of its appreciative users, for the excellence of the original edition in inclusiveness, accuracy, and sound judgment is further augmented by this really amazing war-time edition. It inspires the admiration of both mature scholars and young students as a heavy task courageously attacked and skillfully performed.

MOUNT HOLYOKE COLLEGE

LUCY T. SHOE

THE ROMAN IMPERIAL COINAGE, VOL. IV, PART 2: MACRINUS TO PUPPIENUS, by Harold Mattingly, Edward A. Sydenham, and C. H. V. Sutherland. Pp. xi+215; pls., 13. Spink and Son, London, 1938. 30 sh. (paper, 25 sh.).

No student who has ever groped in the murky labyrinth of the third century after Christ needs to be told that it is a period in which it is more than ordinarily imperative for the numismatist, the archaeologist, and the historian to seek each

other's counsel incessantly if his own researches are to illuminate and not mislead. For this reason the collection and organization of the Roman imperial coinage from Macrinus to Balbinus and Pupienus (A.D. 217-238) which is presented in this volume deserves still greater gratitude than its predecessors in the same series. Nevertheless, considerable use of these volumes, indispensable though they are, can hardly fail to impress one with the feeling that the authors have neglected to take sufficient account of the results of researches outside the numismatic field.<sup>1</sup> Moreover, the appearance of new evidence and new studies on the period covered by this volume of the *RIC*, within a short time after it was published make possible and necessary considerable revisions of its dates and many of its interpretations. The purpose of this belated review is accordingly to examine *RIC*, iv, ii with emphasis on its historical aspects rather than the numismatic.

A few general observations should precede the detailed commentary. First of all, the "Select Bibliography" is far too restricted and too ca-

<sup>1</sup> By way of example, in *RIC*, iv, i, pp. 60, 62, 105, and elsewhere, Septimius Severus' capture of Ctesiphon, on which several other important dates depend, is assigned on the evidence of the Roman coinage to a time late in A.D. 198, or early in 199. By the numismatic evidence alone such a dating seems necessary; but the inscriptions and papyri of the reign show beyond any possible doubt that Ctesiphon was actually captured a whole year earlier. Severus received the title *Parthicus Maximus* upon the capture of Ctesiphon; and this title is found in *CIL*, viii, 4583, dated May 15, 198; *CIL*, viii, 14428, July 20, 198; *POxy*, 916, between May 26 and June 24, 198, etc. (For a more detailed discussion see R. O. Fink, A. S. Hoey, and W. F. Snyder, "The *Feriale Duranum*," *Yale Class. Stud.*, vii, 1940, pp. 79-81). Similarly, Venus Victrix in the coinage of Julia Domna is not a "concession to femininity" (*RIC*, iv, i, pp. 73 and 82) but a variant form of Victoria (Wissowa, *Relig. u. Kultus d. Römer*, p. 292, and Roscher's *Lexikon*, s.v. *Venus*, cols. 196-197, though the Pergamene Aphrodite Nicéphoros postulated by Wissowa probably never existed. The sources which he quotes speak of a Nicéphorion and a temple of Aphrodite—two separate buildings. The Nicéphorion no doubt belonged to Athena Nicéphoros.) and hence quite in harmony with the other parallels between the types of Domna's coins and those of Severus instead of being an exception to the rule.



priciously selected. It is, of course, proper that numismatic publications should be emphasized in the bibliography of a work of this sort; but it is hard to see why an article published by Mowat in 1908 to express the untenable theory that Septimius Severus conferred the title *Augusta* on all his wife's female relatives should be cited when the following works, all of them sufficiently important to be listed in *CAH*, xii, were not even mentioned:

- H. J. Bassett, *Macrinus and Diadumenianus*, University of Michigan, 1920 (Diss.).  
 O. F. Butler, "Studies in the Life of Elagabal," *University of Michigan Studies*, Humanistic Series iv, New York City, 1910, pp. 1-169.  
 M. G. Williams, "Studies in the Lives of Roman Emperors: Julia Mamaea," *University of Michigan Studies*, Humanistic Series, i, New York City, 1904, pp. 67-100.  
 R. V. N. Hopkins, *The Life of Alexander Severus*, Cambridge Historical Essays, no. 14, Cambridge, England, 1907.  
 A. Jardé, *Études Critiques sur la Vie et le Règne de Sévère Alexandre*, Paris, 1925.  
 J. Löhrer, *de C. Iulio Vero Maximo*, Münster, 1888 (Diss.).  
 G. M. Bersanetti, "Studi in Massimo il Tracce: I Rapporti fra Massimo e il Senato," *Rivista Indo-Greco-Italica* xviii, 3-4, 1934, pp. 89-96.  
 C. E. Van Sickle, "A Hypothetical Chronology for the Year of the Gordians," *CP*, xxii, 1927, pp. 416-17.  
 Idem, "Some Further Observations on the Chronology of the Year 238 A.D.," *CP*, xxiv, 1929, pp. 285-89.  
 P. W. Townsend, "The Chronology of the Year 238 A.D.," *Yale Class. Stud.* i, 1928, pp. 231-38.  
 Idem, "A Yale Papyrus and a Reconsideration of the Chronology of the Year 238 A.D.," *AJP*, li, 1930, pp. 62-66.

This list makes no attempt at exhaustiveness; it might very well be expanded.

Many of the works mentioned above deal with chronology; and it is perhaps in this department that the greatest weakness of the present volume appears. Details will be found below. Another fault is the lack of consistency in the omission or inclusion of medallions. The authors of the *RIC* do not regard bronze medallions as a part of the coinage of the empire; but in their first volume they state (p. 33), "It has been established beyond all reasonable doubt that all gold and silver pieces of unusually large size are multiples of *aurei* or *denarii*—in some cases issued on special occasions but recognized as current money." A historian would, of course, be glad to have the bronze medallions made available for study along with the other productions of the imperial mint; and in practice the authors of the *RIC* find that they themselves cannot ignore the medallions (note the discussions on pp. 64-65, 67-68, and 135). In any case, one would expect to find the silver

and gold medallions included with the coins if they were recognized as current money. In the present volume, however, the situation is as follows. The silver and bronze medallions of Macrinus and Elagabal are omitted, though one gold one of Elagabal (p. 33, no. 65) and one silver one each for Julia Paula and Annia Faustina (pp. 45 and 48, nos. 209 and 233) are included. Most of the silver medallions, but none of the bronze or gold, of Severus Alexander and Mamaea are included. Then for Maximinus and his successors the bronze medallions are listed as well, though separately, "for the sake of completeness." Similarly, no comment is made on the omission of coins listed by Cohen until the end of the section devoted to Maximinus Thrax; thereafter notes listing the omitted numbers are appended to each section.

The introductions to the sections dealing with the individual emperors may now be discussed in detail.

#### MACRINUS AND DIADUMENIANUS

- p. 1. It is misleading to speak of Macrinus as having been made emperor by a "party." The narratives of Dio Cassius and Herodian agree in representing the murder of Caracalla as a fortuitous matter, undertaken by Macrinus on the spur of the moment in a desperate effort to save his own life. It is true that he seems to have had accomplices; but that is quite another thing from the support of a party. Nor is there any indication that Macrinus "fell victim to the caprice" of his original supporters. He was never popular with the common soldiers; and it was these whom Julia Maesa and Comazon persuaded to revolt. See the accounts of Dio Cassius in book lxxix and Herodian iv, 13, 7 to 14, 5 and v, 2, 3, to 4, 10.  
 pp. 2 and 3. The date of Elagabal's proclamation as emperor was May 16, A.D. 218, not April 16. See Dio lxxix, 31, 4 (Loeb ed., p. 410).<sup>1</sup> The dating in April rests on a needless emendation proposed by Wirth.<sup>2</sup>  
 p. 2. The suggestion that Macrinus' coins with *Victoria Parthica* may have been issued in anticipation of a victory can be dismissed and the other alternative, that they were meant to represent as a real victory Macrinus' settlement with the Parthians, can be accepted as the true explanation. There is no evidence for the mint-  
<sup>1</sup> A. Wirth, *Quaestiones Severianae*, Leipzig, 1886, pp. 40-41.



ing of such a type at the opening of a campaign, and a great deal of evidence that Victoriae of this sort normally represented actual decisive victories. See R. O. Fink, "*Victoria Parthica* and Kindred Victoriae," *Yale Class. Stud.* viii, 1942, pp. 81-101, esp. pp. 90-91.

- p. 3. April 24, 218, is suggested as the date of the *liberalitas* commemorated on Macrinus' coins, and the "donatives given to the army and populace . . . by means of which Macrinus strove to gain support against his rival, Elagabalus, who had been proclaimed emperor on April 16." The occasion of this *liberalitas* is accordingly assumed to be Macrinus' proclamation of his son as emperor (Dio lxxix, 34, 2-3; Loeb ed., p. 416); but I know of no basis for the exact dating on the twenty-fourth of the month, which in any case must be May, not April. On the other hand, Macrinus had given two donatives before this time, as is evident from Dio lxxix, 19, 1-2 (Loeb ed., p. 380), the first obviously on his accession and the second when he made Diadumenianus Caesar and gave him the name Antoninus. It is accordingly not certain at all that these coins all refer to the same *liberalitas*, or if they do, to which.

- pp. 3-4. The ascription of portrait 1 of Macrinus to the Roman mint and of portrait 2 to an Eastern mint seems possible, though the authors make no use of the distinction; but the discussion of the intermediate portrait 3, which is almost immediately admitted to be indistinguishable from 2, shows how subjective the scheme is. Even if the portraits differed sufficiently to indicate different mints, the argument regarding the causes of these differences is certainly too fine-drawn. It is said that "At Rome Macrinus was personally unknown, at any rate during the latter part of his life"; but he had been curator of the Flaminian Way and had probably been made praetorian prefect before he left Rome,<sup>3</sup> while the period from his departure until he became emperor was only about three years. Similarly, to say that he "spent the whole of his reign" in the East overlooks the fact that his reign lasted only fourteen months. Moreover, he was under fifty-four at the time of his death (Dio, lxxix, 40, 3), so that all in all the argument from the "younger" appearance of portrait 1 and the "elderly ren-

dering" of portrait 2 cannot be given much weight.

#### ELAGABAL

- pp. 24 and 27. The date of Alexander's appointment as Caesar is stated as July 10, A.D. 221, without citing the evidence or referring to the many other dates proposed for this event. The correct date is now shown by the *Dura Feriale* to lie between June 14 and 30, probably June 26. See W. F. Snyder in "*The Feriale Duranum*," pp. 141-143, esp. note 620.

- p. 24. The SHA. is named as authority for the statement that Elagabal's adoption of Alexander "appears to have been engineered in the first place by the Senate"; but aside from the erroneous statement in SHA. *Elag.* 5, 1 (repeated in 10, 1) that Alexander was named Caesar by the Senate at the time of Macrinus' death there is no trace in this account of any initiative on the part of the Senate;<sup>4</sup> and the narratives of Dio and Herodian make it perfectly clear that the moving forces were Maesa and Mamaea. Concerning the events which followed the adoption, references to SHA. *Elag.* 13, 1 to 17, 3 and Herodian v, 7, 1 to 8, 10 should be added.

- pp. 24-25. The coins with the legend *Conservator Aug* and a representation of the black stone of the god Elagabal probably relate to the annual procession in honor of the god described by Herodian (v, 6, 6-8) rather than merely to the first entry of the new emperor and his god into the city. Cf. O. F. Butler, *op. cit.* (above, p. 111), pp. 151-153.

- pp. 25-26. The assertion that the type of the emperor in a quadriga must refer to his victory over Macrinus is without foundation. The type is a conventional one; and, as the authors note, is repeated in every year of Elagabal's reign. The true explanation is probably that these coins were minted in connection with Elagabal's assumption of the consulship in each year. Note for example that all of Severus Alexander's coins with the quadriga type were minted, as mentioned on p. 62, first note, in the years of his consulships (A.D. 222, *cos.*: p. 72, nos. 15-17A; A.D. 226, *cos. II*: p. 75, nos. 56-56A, and p. 107, nos. 448 and 452; A.D. 229, *cos. III*: p. 78, nos. 98-99, and p. 110, nos. 495-499) with the exception of two (A.D. 227, p. 108, no.

<sup>3</sup> L. L. Howe, *The Praetorian Prefect from Commodus to Diocletian*, Chicago, Illinois, 1942, pp. 72-73.

<sup>4</sup> Regarding the contrary report that Alexander was made Caesar by the army, see A. S. Hoey in "*The Feriale Duranum*," note 845.



471; and A.D. 233, p. 80, no. 121), both of which are incompletely described by Cohen but may refer to real military successes.<sup>5</sup> Cf. further A. Alföldi, "Die Ausgestaltung d. monarchischen Zeremoniells am röm. Kaiserhofe," *RM.* xlix, 1934, pp. 93-97, esp. p. 95, note 2, which reveals a similar linking of triumph and consulate as early as the reign of Domitian, and "Insignien u. Tracht d. röm. Kaiser," in the same series, I, 1935, pp. 33-34. This is not to say, of course, that the quadriga type was not used to commemorate victories, but only to point out that it had other uses as well.

- p. 26. The legend *Victor(ia) Antonini Aug* which accompanies a type of running Victoria with a wreath and palm may contain, as the authors say, "a covert slur on Macrinus and his son as dynastic interlopers"; but it seems much more probable that it is simply an example of the familiar "personal" Victoria which began with Sulla's *Victoria Sullana* and Caesar's *Victoria Caesaris* and is to be found rather frequently in the coinage and inscriptions from that time on—*Victoria Claudii*, *Victoria Galbae*, *Victoria Severi Augusti*, etc. For more details see R. O. Fink, "*Victoria Parthica*," *Yale Class. Stud.* viii, 1942, pp. 81-101, esp. pp. 83-87 and 93-94.
- p. 26. The reference to Michael Angelo's portrayal of Moses does little to elucidate the reasons for representing Elagabal as horned in some of his portraits. On this point see Hastings' *Encyclopedia of Religion and Ethics*, s.v. *Horns*, from which it is evident that horns were an attribute of innumerable Near Eastern divinities, especially of Mesopotamia and Syria, and a symbol of divine and kingly might. The horned portrait of the emperor Elagabal therefore is probably intended both to indicate his absolute authority as ruler and to identify him with the god Elagabal.
- p. 27. The fact that Elagabal's coins with the legend *Aeternitas* seem to have been minted in the East deserves some emphasis, for Elagabal was one of the few emperors before the middle

of the third century to claim *aeternitas* for himself. See R. O. Fink in "*The Feriale Duranum*," pp. 59-65.

On March 11 as the date of Elagabal's murder, see below.

p. 31. Read "TR. P. IIII (A.D. 221)".

#### SEVERUS ALEXANDER

p. 62, first note. The first three dates contain typographical errors. They should, of course, be A.D. 222, 224, and 226. The authors' remonstrance in their preface (p. vii) against Pink's too sweeping simplification of the Roman coinage is justified; and consequently their citation at length in this note of Pink's analysis (which is called "masterly") of Alexander's coinage is confusing, especially since the authors make no comment on Pink's views and make no use of them in their own discussion and arrangement of the coins. They should have heeded Pink's observation that the quadriga reverse is used as a type of the consulship (above, p. 112); but they are probably right in not following his opinion that "the star on some earlier issues is a borrowing from Elagabal, not a mark of Eastern mintage." On Pink's "The coinage of Julia Mamaea probably begins in A.D. 226 with that of Orbiana," the authors take no stand, assigning no dates whatever to Mamaea's coins; but Mamaea began coining in Alexandria and elsewhere in A.D. 223/24,<sup>6</sup> and hence why not in Rome? The startling anachronism which Pink committed in making a "revolutionary party" (no doubt Syrian or Lebanese Nationalists) responsible for Alexander's Eastern issues is rightly not allowed to dissuade the authors from listing these coins as the products of the official mint at Antioch. In one instance, in fact, the authors assign to the mint of Rome a coin (p. 86, no. 215) which is specifically singled out on p. 68 as appearing to have been struck "mainly in the East (Antioch)"; and it is not even repeated in the lists devoted to the coins minted at the latter city. Under these circumstances Pink's idea seems hardly worth quoting.

p. 63. How was it possible for Maesa and Mamaea to be adherents of Mithraism, a cult which excluded women?

pp. 64, 66, and 69. The date of Maesa's death is set early in A.D. 223 without comment. Actually

<sup>5</sup> J. Vogt, *Alexandrinischen Münzen* ii, pp. 126-127.

<sup>6</sup> J. Vogt's deduction from the coins of Rome, Alexandria, and Caesarea in Cappadocia that victories were won under Alexander's auspices in A.D. 225/26 and 227/28 (*Die Alexandrinischen Münzen* i, p. 186) ought probably, in the light of the foregoing, to be rejected for A.D. 225/26. This putative victory will then cease to be a possible subject for the entry in the *Dura Feriale*, col. II, 27; "*The Feriale Duranum*," p. 154.



the date is unknown; but Maesa's deification appears not to have occurred until after November 7, 224, for in the *Acta Fratrum Arvalium* a sacrifice is recorded on that date to twenty *divi* and *divae*, the same number as in A.D. 218.<sup>7</sup> Deification, however, unless something occurred to delay it, took place within a very short time after the death of the person concerned. So, for example, Marciana was consecrated immediately after her death on August 29, 112;<sup>8</sup> and Herodian implies the same for Maesa.<sup>9</sup> On the other hand, the order of events in Herodian's narrative shows that Alexander's marriage, the date of which is fixed between August 225, and August, 226,<sup>10</sup> took place after Maesa's death. It is reasonably certain, therefore, that Maesa died between November 7, 224, and August, 226.<sup>11</sup>

p. 66. It should be emphasized that the date of Alexander's marriage, as well as that of Maesa's death, is uncertain. All that can be said is that on the evidence of the coinage of Alexandria the marriage occurred after August, 225, and before August, 226, and was terminated before August, 227. It is all but certain that Alexander was married only once. See A. Jardé, *op. cit.* (above, p. 111), pp. 67-73, and R. O. Fink, "Lucius Seius Caesar, *Socer Augusti*," *AJP*. lx, 1939, pp. 326-332.

pp. 66-67 and Introduction, pp. v-vi. The difficulty of explaining the legends *Mon(eta) Restituta* and *Restitutor Mon(etae)* is well stated; but the explanation here proposed, that the *Antoninianus* and *dupondius* were abolished at the same time, that the *dupondius* was later restored, and that "on the occasion of this restoration, homage was paid to the emperor as the restorer of the coinage, through which as paymaster he supplied the needs of his troops"

<sup>7</sup> W. Henzen, *Acta Fratrum Arvalium*, Berlin, 1874, pp. cxciv, and ccii.

<sup>8</sup> G. Calza, "Ostia—Un nuovo frammento di Fasti Annali (anni 108-113)," 1932, pp. 190 and 198.

<sup>9</sup> Herodian vi, 1, 4-5: ἐπὶ πολὺ δ' οὕτω τῆς ἀρχῆς διοικουμένης, ἡ μὲν Μαῖσα πρεσβυτίς ἤδη οὐσα ἀνεπαύσατο τοῦ βίου, ἐτυχέ τε βασιλικῶν τιμῶν καὶ, ὡς νομίζουσι Ῥωμαῖοι, ἐξεθείσθη, κτλ.

<sup>10</sup> J. Vogt, *Alexandrinischen Münzen* i, p. 184; ii, pp. 127 f.

<sup>11</sup> For a more detailed discussion of this question, see "The *Feriale Duranum*," pp. 22, 113-114, and 182.

is in fact no improvement over Pink's suggestion, which would refer the "restoration" to the resumption of the minting of the *dupondius*. If the emperor advertised himself to his troops as a dispenser of *dupondii*, it is quite understandable why he and Mamaea were ultimately murdered for their niggardliness. On this whole question see now Louis C. West, *Gold and Silver Coin Standards in the Roman Empire* (Numismatic Notes and Monographs, no. 94; New York, 1941), pp. 130-132, esp. note 294, in which reference is made to an article in *Numismatische Zeitschrift*, 1909, p. 87, explaining the *restituta-restitutor* legends as having been occasioned by the rebuilding of the mint.

pp. 67-68. It is scarcely true that the only explicit references to Alexander's Persian campaign are the bronze medallion cited here (Cohen, *Alex.*, no. 446) and the *as* on p. 124, no. 666A, for the other *Profectio Aug.* types of A.D. 231 (*RIC*. p. 86, no. 210; p. 112, no. 524; p. 121, nos. 639-641) would have meant nothing else to a contemporary. By way of indirect references, the two issues of the mint of Antioch in A.D. 228 and 230, if these are correctly ascribed and if they are in fact the first from that mint after A.D. 223, were worthy of mention as evidence of the preparations, perhaps begun even in 227, for the campaign which took place in 231. If *denarii* such as no. 215, p. 86, were actually struck at Antioch, they belong with the two types just mentioned.

p. 68. Although the *Cambridge Ancient History* keeps mid-March of A.D. 235 as the time of Alexander's death (vol. xii, p. 71), the dating of P. Oxy. 912 by Maximinus as emperor on February 25, 235, completely precludes the possibility that Alexander was killed in March and renders it probable that the real date was, at the latest, early in January.<sup>12</sup>

<sup>12</sup> C. E. Van Sickle, taking March 11, 222, as the date of Alexander's accession, arrived at January 8, 235, as the time of his murder ("The Terminal Dates of the Reign of Alexander Severus," *CP*. xxii, 1927, pp. 315-317); and although it is now known from the *Dura Feriale* that the actual day of Alexander's accession was March 13 and that the date of his appointment to the Caesarship was probably June 26, so that the divergent data regarding the length of his life and of his reign used by Van Sickle can no longer be made to agree on any single date for Alexander's death, the general conclusion that his death occurred no later than the first week of January is still valid.



p. 128. The "definite allusion to Alexander in the title MAGNO given to Caracalla" in the memorial issues minted for the latter does not "point to the time of Severus Alexander." This is getting the cart before the horse, for the boy who was born Gessius Bassianus Alexianus was given the name Severus Alexander on his accession in order to strengthen and to publicize his claim to be the son of Caracalla. It is well known that Caracalla wanted to be an Alexander during his own lifetime<sup>13</sup> and that he was deified under Macrinus; and as a *divus* he certainly had the title *Magnus* at least as early as the time of Elagabal and probably from the beginning.<sup>14</sup> Hence these coins of the deified Caracalla may possibly belong in the reign of Macrinus, and almost certainly in that of Elagabal at the latest. On the other hand, it is quite likely that Julia Domna was not deified until the time of Maesa's death and deification, about A.D. 225 (above, p. 114). The memorial issues of these two *divae* ought, accordingly, to be placed together, but separated from those of Caracalla.

#### MAXIMINUS

On this and the two succeeding reigns little additional comment is needed, except to point out that the results of the careful studies of Townsend and Van Sickle on the chronology of the year A.D. 238 (above, p. 111), which seem to have been adopted by the *Cambridge Ancient History*, might have been used with at least as much justification as the data offered for Macrinus, Elagabal, and Alexander to give more precision to the rather vague chronological indications presented. Townsend dates the events of this year as follows:

Beginning of the Gordians' revolt in Africa ..... ca. March 19  
 Senatorial proclamation of the Gordians as *Augusti*, and Appointment of the board of twenty under Pupienus and Balbinus ..... April 2  
 Death of the Gordians in Africa ..... ca. April 22-24  
 Death of Maximinus ..... May 10

<sup>13</sup> Dio lxxviii, 7 and 8; lxxviii, 16, 7; 18, 1; 22, 1; Herodian iv, 10, 2-4 and 8, 1 (esp. 8, 1-3) to 9, 4; SHA. *Caracalla* 2, 1-2.

<sup>14</sup> He is called *Magnus* in *CIL*. viii, 2564 and 10304 (Dessau *ILS*. 470 and 471) and in *ILS*. 472, all of the time of Elagabal.

Pupienus and Balbinus made *Augusti* . . . May 27  
 Death of Pupienus and Balbinus; accession

of Gordian III. . . . . July 9  
 p. 158. The comments on "the constitutional and pro-senatorial tone of the reign of Severus Alexander" and "the imperishable tradition of constitutionalism at Rome" contradict what is said of Alexander's reign on p. 63. Moreover, *Romae Aeternae* is easily explained as the conventional type of the Eternal City which occurs frequently from the time of Hadrian to the end of the fourth century. See A. S. Hoey in "The *Feriale Duranum*," pp. 103-111. There is nothing of a tradition of constitutionalism in it. Nor can *Securitas Augg* very well be a pledge on the part of the Gordians to maintain constitutionalism. It must rather be an assertion of the "confidence of the *Augusti*" in their position—a confidence not justified by their strength, of course, but throughout the book there is a persistent tendency to interpret the coin legends too literally and to miss their function as propaganda.

\* \* \* \* \*

The list which follows presents some of the results of a careful collation of Cohen, second edition, and the volume under review. No attempt is made to do more than to report obvious misprints and inconsistencies in the *RIC*, which could be noted without seeing the coins themselves. References to coins not listed in Cohen have not been checked, although the proportion of such coins is rather high, because it seemed probable that the standard of accuracy would be better in these special notes and that the results would accordingly not repay the great additional effort of pursuing the references through the periodicals and catalogues in which they are scattered.

*RIC*. p. 7, no. 22A—add reference to C. 60, denarius with obv. portr. "c".  
 p. 13, no. 101. Read "wreath or hand" for "wreath on hand".  
 p. 29, no. 18 is the same as C. 148 but not C. 149. The latter is a denarius with portr. "b" and is the same as *RIC*. p. 29, no. 19.  
 p. 30, no. 35. The correct C. reference is no. 172. C. 173 is bronze, not gold, and is the same as *RIC*. p. 54, no. 308.  
 p. 41, last note. This note is meaningless.

The same coins are found on pp. 31 and 41, 32 and 42, 34 and 43, and 37 and 43 of *RIC*. Cross-references are sometimes provided and sometimes not.

*RIC*. p. 73, no. 24. Listed here as a denarius; but Cohen cites it as a silver quinarius in Vienna. If he is wrong, the fact should have been noted.



- p. 93, no. 297. The note saying that Cohen describes this coin (his no. 527) as *P.B.* is misplaced. It belongs with *RIC*, no. 295, Cohen's no. 497.
- p. 95, no. 316. Cohen's description shows that the reverse type is the same as *RIC*, 229—central Moneta facing—not as *RIC*, 186—all Monetae stg. 1.
- p. 105, no. 423. The number in Cohen is 259, not 359.
- p. 105, no. 431. Cohen's description shows that the reverse type is as *RIC*, 407—*Securitas* seated by altar—not as *RIC*, 395—no altar.
- p. 114. Note that the dates of the obv. legends are capable of closer definition. Legend 2 runs only until A.D. 229 (pp. 109–110 and cf. pp. 80–84); and legend 4 runs from A.D. 228 to 231 (pp. 108–112 and cf. pp. 85–87).
- p. 118, no. 591. For "C. 179" read "C. 189".
- p. 120, no. 632. For "C. 87" read "C. 88".
- p. 120, no. 633. For obv. type "c" read "a (or b), c"; and for "C. 86" read "C. 86, 87".
- p. 123, no. 661. Cohen reports the obv. legend as ending *MAT. AVG.*, and notes that a specimen in the British Museum has *MATER AVG.* The *RIC* reports only the latter.
- p. 124, no. 666. The obv. legend is reported as ending *MAT. AVG.*, but is also said to be the same as no. 659, which has *MATER AVG.* Cohen's description of no. 666 (his no. 15) also has *MATER AVG.*

With Maximinus begins the listing of bronze medallions in the *RIC*. Note especially p. 150, no. 113, and p. 151, nos. 116 and 118, all of sestertius module. With these should be compared the issues of Alexander and Mamaea, *RIC*, pp. 123–124, nos. 662– and 665–667, and of Mamaea, *RIC*, pp. 125–126, nos. 674, 689–690, 692–693, all without *S.C.* This group of coins surely deserves some comment.

For this reign, too, the omissions of types listed by Cohen are noted either at the foot of the appropriate page or in the lists on pp. 152 and 157. Of these latter, however, Cohen Maximin. 1 is plainly the coin meant in par. 1 of the notes on p. 152, though it is not named; Cohen Maximinus 4 is listed without comment on p. 150, no. 113; Cohen Maximinus 51 is listed on p. 139, no. 2, with a note expressing the authors' doubts; Cohen Maximinus 52 appears on p. 151, no. 114, without comment; and Cohen Maximinus 95 is listed as a hybrid on p. 143, no. 102.

*RIC*, p. 142, no. 23. The obv. type, omitted in *RIC*, is (2) b.

The coins of Gordian I and II which are rejected by *RIC*, are listed on pp. 162 and 164. Note, however, that Cohen Gord. I, 1, and Cohen Gord. II, 1, are reported on p. 176 as hybrids; and that Cohen Gord. II, 3, is found on p. 162, no. 16.

Rejected coins of Balbinus and Pupienus are listed on pp. 172 and 176; but note that Cohen Balb. 12 is found on p. 171, no. 15A, and Cohen Pup. 37 appears on p. 174, no. 8A. Cohen Pup. 8 is commented on more fully on p. 175, note to no. 20.

\* \* \* \* \*

I have made no systematic attempt to check the indices; but I note that in Index III there is no entry for STAR, although this symbol is quite common on the coins of Elagabal and Alexander, and that under TEMPLE there is no reference to

p. 55, no. 339, with rev. type of Elagabal stg. 1. in a temple.

\* \* \* \* \*

[The reviewer, while accepting all responsibility for errors of fact or judgment in the foregoing, wishes to acknowledge the valuable advice and criticism of Professor A. R. Bellinger of Yale.]

BELOIT COLLEGE

ROBERT O. FINK

*MEDIAEVAL ART*, by Charles Rufus Morey. Pp. xv + 412. Ills. 180, with numerous line drawings in the text. W. W. Norton and Co., N. Y., 1942. \$7.50.

The appearance of this volume marks the realization of a hope on the part of students and teachers of mediaeval art that began to form with the publication of an article by Dr. Morey entitled "The Sources of Mediaeval Style" (*Art Bulletin* vii, 2, 1924), and grew with the small volume *Christian Art* (Longmans, Green and Co., N. Y., 1935). Those who had been privileged, like the reviewer, to attend Morey's undergraduate course and graduate seminars at Princeton were already fully aware of the scope of knowledge and keenness of perception that lay behind the compact sentences and illuminating phrases of both article and book, and wished for the means of renewing the original experience for themselves and for others the possibility of enrichment by contact with it, however vicarious. These wishes can now be realized, for in the work under consideration, Morey has summed up the conclusions of many years of research and teaching in the field of mediaeval art. The result is unique as a volume in English presenting a broad survey of that field in its entirety.

Being comprehensive in its coverage, a detailed consideration of the many points raised in the book would enlarge such a notice as this beyond the available limits of space. Moreover, since it is a work intended primarily for the general reader rather than the research scholar (though it should not be imagined that the latter could not read it with great profit), the most constructive consideration to be given it is not one of controversy but rather as an estimate of a general point of view developed from meticulous study of material that has been presented in considerable part in other works. Thus in the volume *Early Christian Art* (Princeton University Press, Princeton, N. J., 1942) reviewed in this JOURNAL by Dmitri Tselos (*AJA.* xlvii, 1943, pp. 144–149), the step-by-step documentation of the transforma-



tion of classic into Christian style is given by Morey; in the present work, the character of this evolution is stated in more generalized terms in the first three chapters, beginning with a broad definition of the factors and phases of mediaeval art that is followed by discussions of Early Christian and Byzantine style illustrating respectively the development of transcendentalism and contemplative mysticism as elements of content. Succeeding these are chapters on Romanesque, Gothic and Late Gothic art, the qualifying subtitles of the chapters—Positive Mysticism, The Scholastic Synthesis and the Realistic Movement—providing the key to the interpretation of their several contents. In the final chapter on Late Gothic, the diffusion of the mediaeval point of view in the Renaissance is dwelt upon at some length and its contribution to the modern spirit is defined.

Two qualities of this work are outstanding in the opinion of this reviewer, either of which alone would establish it as one of primary importance. The first is the fact that it takes note of substantially every major monument of painting, sculpture and the minor arts of the Middle Ages, along with statements in more general terms of the contemporary architecture that provides an appropriate background. These are discussed briefly of necessity, but with a felicity of phrase and aptness of characterization that make for admirably precise and clear evaluation. The second is the impression created by the book as a whole of the mediaeval period as a time of great and purposeful enterprise, concerned alike with the realities of both spiritual and material life. This grows from the awareness that no attentive reader can fail to have of the author's respect for his material and insistence on letting it speak for itself. So, unlike the preconceived idealism with which a Henry Adams viewed the mediaeval scene, or at the opposite extreme, the equally arbitrary materialism of a Coulton, the sympathetic yet critical understanding of the author has produced a conception of the Middle Ages that is controlled and determined by its own inherent qualities. It is a point of view, indeed, which is allied in kind to that of the Gothic age itself, viewing the world of its study comprehensively and seeing in its material a significance that informs its every facet with meaning. It is not in the nature of such an interpretation that the conclusions reached will be undebatable in every case, and many will doubtless be argued, yet it is

doubtful that any more systematic and illuminating interpretation of the whole can be achieved, present knowledge being what it is.

The illustrations are an indispensable part of the book and are distributed on plates of coated stock at more or less regular intervals in the text pages. This method of handling them, imposed perhaps by exigencies of manufacture, results in a frequently unfortunate separation of the discussion of a monument from its illustration, a difficulty compensated for in part by the inclusion in the text of numerous line drawings that serve as broad indications of style and iconography. In their entirety, the illustrations constitute a basic corpus of mediaeval art that could well serve as the nucleus of any comprehensive collection of pictorial material pertaining to the Middle Ages. The whole is a tribute to the publishers for being willing to undertake a project of constructive character; for making it possible for Morey to extend beyond the limits of professional and scholarly publications the results of his creative scholarship, they merit the unqualified thanks of all students of our heritage of culture and civilization.

UNIVERSITY OF PENNSYLVANIA DAVID M. ROBB

#### CORRECTION

Mr. Panofsky draws my attention to a mistake which slipped—entirely through my own fault—into my review of Sumner Crosby's book, *The Abbey of St. Denis* (*AJA.* xlviii, 1944, p. 218). In proposing a different reconstruction for the west porch of the Carolingian church I suggested that the center part of the front *jutted out* beyond the flanking bays, since the wall of his center bay is thicker than those in the lateral bays. It is correct that this wall is thicker and that therefore, as I suggested, the center part was probably higher than the flanking towers mentioned by Suger. But the thick wall, rather than projecting on the *outside*, is stronger on the *inside*, thus narrowing the interior width of the central bay while leaving the outside flush. This may seem a minor point, yet it should be corrected in view of future reconstructions of the west façade.

My only explanation for having made this mistake is that the review, written while I was working full time for the government, had to be composed in little patches of night work and without the concentration of mind it should have commanded.

VASSAR COLLEGE

RICHARD KRAUTHEIMER



THE ARTS AND RELIGION, THE AYER LECTURES OF THE COLGATE-ROCHESTER DIVINITY SCHOOL, by *Albert Edward Bailey, Kenneth John Conant, Henry Augustine Smith, Fred Eastman*. Pp. xiv + 180, pls. 24. New York, 1944, The Macmillan Co. \$2.50.

The four lectures here published are prefaced by Professor Bailey's introduction entitled "The Antiquity and Universality of the Arts," providing an historical background, well-constructed considering its summary character, for the four lectures on "Religion in Painting and Sculpture" (Bailey), "The Expression of Religion in Architecture" (Conant), "The Expression of Religion in Music" (Smith), and "The Dramatist and the Minister" (Eastman). Each section is provided with a brief bibliography.

Professor Bailey's lecture takes the form of a tour through an imaginary Museum of Religious Art, with five rooms each devoted to the objectives of religious art as he views them, viz., the symbolic presentation of divine beings, the factual representation of human beings associated with the history of religion, the presentation of the dogmas of the faith, "bhakti," the artist's symbolic self-offering to God, and, in the fifth room, the social application of religion in art. The last section pays tribute to those moderns who, in contrast to the escapists, have faced and expressed the squalor of contemporary materialism. The rest of the chapter is a model of semi-popular simplification, convincing, however, in its effort to make an audience feel through religious art the unity and consistency of religious aspiration throughout history and throughout the world.

Conant's brief chapter appealed most to this reviewer, who finds himself on too unfamiliar ground to comment on the lectures on music and drama in religion. The distinguished Harvard mediaevalist gives in his few pages some characteristically original insights into mediaeval church-building: an aesthetic appreciation of Old Saint Peter's, a parallel between Byzantine and Gothic construction, a fine reconstruction of St. Riquier, and an evaluation of St. Bénigne and Cluny in the evolution of Romanesque.

Dr. Smith's lively discussion of religious music is a diverting mélange of history and critique, resolved into order by the sub-titles of "Tonal Structure," "Expression," "Masters and Schools," "Religious Music in America," and "Universal Song." The pithy criticism of contemporary church music which enlivens his historical retrospect, becomes a lesson in the art of preaching in Dr. Eastman's chapter, which draws a parallel between a sermon and Galsworthy's "Loyalties," deducing therefrom what the dramatist can teach the minister, "to think in terms of pictures, and especially pictures of flesh and blood persons." Dr. Eastman has the Protestant service solely in mind, as his title indicates, and has nothing to say of the dramatic element in other worships, where the worshipper has a part to play in the service and is not so completely on the receiving end. The book has sparse but appropriate illustrations, among which Conant's reconstructions of S. Riquier and St. Bénigne are especially welcome, as well as an unusually good photograph of the interior of Hagia Sophia.

PRINCETON UNIVERSITY

C. R. MOREY

## ABBREVIATIONS

The following abbreviations of the titles of publications will be used in the JOURNAL, other titles being uniformly abbreviated:

- AA: Archäologischer Anzeiger.
- AASOR: Annual of the American Schools of Oriental Research.
- AASPR: Annual of the American School of Prehistoric Research.
- ABA: Abhandlungen der Preussischen Akademie der Wissenschaften, Berlin.
- ActaA: Acta Archaeologica.
- AdI: Annali dell'Istituto.
- AEM: Archäologisch-epigraphische Mitteilung.
- AJ: Antiquaries' Journal.
- AJA: American Journal of Archaeology.
- AJN: American Journal of Numismatics.
- AJP: American Journal of Philology.



- AJSL*: American Journal of Semitic Languages.  
*AM*: Athenische Mitteilungen.  
*Annuario*: Annuario della R. Scuola Archeologica di Atene.  
*AntDenk*: Antike Denkmäler.  
*AOF*: Archiv für Orientforschung.  
*ARW*: Archiv für Religionswissenschaft.  
*AV*: Gerhard, Auserlesene Vasenbilder.  
*AZ*: Archäologische Zeitung.  
*BASOR*: Bulletin of the American Schools of Oriental Research.  
*BASPR*: Bulletin of the American School of Prehistoric Research.  
*BCH*: Bulletin de Correspondance Hellénique.  
*BdA*: Bolletino d'Arte.  
*BdI*: Bolletino dell'Istituto.  
*BFM*: Bulletin of the Fogg Museum.  
*BIAB*: Bulletin de l'Institut Archéologique Bulgare.  
*BJ*: Bursian's Jahresbericht.  
*BLund*: Bulletin de la Société Royale de Lettres de Lund.  
*BMFA*: Bulletin of the Museum of Fine Arts, Boston.  
*BMFEA*: Bulletin of the Museum of Far Eastern Antiquities.  
*BMMA*: Bulletin of the Metropolitan Museum of Art, New York.  
*BMQ*: British Museum Quarterly.  
*BPI*: Bolletino di Paleontologia Italiana.  
*BrBr*: Brunn-Bruckmann, Denkmäler.  
*BRGK*: Berichte der Römisch-Germanischen Kommission des Deutsch. Arch. Instituts.  
*BRISD*: Bulletin of the Rhode Island School of Design.  
*BSA*: Annual of the British School at Athens.  
*BSR*: Papers of the British School at Rome.  
*BullComm*: Bolletino della Commissione Archaeologica Comunale di Roma.  
*BZ*: Byzantinische Zeitschrift.  
*CAH*: Cambridge Ancient History.  
*CIL*: Corpus Inscriptionum Latinarum.  
*CP*: Classic Philology.  
*CQ*: Classical Quarterly.  
*CR*: Classical Review.  
*CRAI*: Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres.  
*CVA*: Corpus Vasorum Antiquorum.  
*CW*: Classical Weekly.  
*Δελτ*: Ἀρχαιολογικὸν Δελτίον.  
*DLZ*: Deutsche Literaturzeitung.  
*Ἐφ*: Ἀρχαιολογικὴ Ἐφημερίς.  
*FR*: Furtwängler-Reichhold, Griechische Vasenmalerei.  
*FuF*: Forschungen und Fortschritte.  
*GBA*: Gazette des Beaux-Arts.  
*GGA*: Göttingische Gelehrte Anzeigen.  
*HarvSt*: Harvard Studies in Classical Philology.  
*IG*: Inscriptiones Graecae.  
*ILN*: Illustrated London News.  
*JAOS*: Journal of the American Oriental Society.  
*JdI*: Jahrbuch d.k.d. Archäologischen Instituts.  
*JEA*: Journal of Egyptian Archeology.  
*JHS*: Journal of Hellenic Studies.  
*JOAI*: Jahreshäfte des Oesterreichischen Archäologischen Instituts.  
*JPOS*: Journal of the Palestine Oriental Society.  
*JRAI*: Journal of the Royal Anthropological Institute.  
*JRAS*: Journal of the Royal Asiatic Society.  
*JRS*: Journal of Roman Studies.  
*LAAA*: Liverpool Annals of Archaeology and Anthropology.  
*MAAR*: Memoirs of the American Academy in Rome.



- MDOG*: Mitteilungen der Deutschen Orient-Gesellschaft.  
*Mel*: Mélanges d'Archéologie et d'Histoire.  
*MJ*: Museum Journal of the University of Pennsylvania.  
*MonAnt*: Monumenti Antichi.  
*MonInst*: Monumenti dell'Istituto.  
*MonPiot*: Monuments et Mémoires pub. par l'Acad. des Incriptions (Fondation Piot).  
*MJb*: Münchner Jahrbuch der bildenden Kunst.  
*NJ*: Neue Jahrbücher für das klassische Altertum.  
*NNM*: Numismatic Notes and Monographs.  
*NS*: Notizie degli Scavi di Antichità.  
*NumChron*: Numismatic Chronicle.  
*NZ*: Numismatische Zeitschrift.  
*OIC*: Oriental Institute Communications.  
*OIP*: Oriental Institute Publications.  
*OLZ*: Orientalistische Literaturzeitung.  
*PAPS*: Proceedings of the American Philosophical Society.  
*PEFA*: Palestine Exploration Fund Annual.  
*PEFQ*: Palestine Exploration Fund Quarterly Statement.  
*PM*: Evans, Palace of Minos.  
*PPS*: Proceedings of the Prehistoric Society.  
*PQ*: Philological Quarterly.  
 Πρακτ.: Πρακτικά τῆς Ἀρχαιολογικῆς Ἑταιρίας.  
*PW*: Philologische Wochenschrift.  
*PZ*: Prähistorische Zeitschrift.  
*QDAP*: Quarterly of the Department of Antiquities in Palestine.  
*RA*: Revue Archéologique.  
*RB*: Revue Biblique.  
*RE*: Pauly-Wissowa-Kroll, Real-Encyklopädie der Klassischen Wissenschaft.  
*REA*: Revue des Études Anciennes.  
*REG*: Revue des Études Grecques.  
*RendLinc*: Rendiconti della Reale Accademia dei Lincei.  
*REp*: Revue Épigraphique.  
*RevNum*: Revue Numismatique.  
*RevPhil*: Revue de Philologie.  
*RHA*: Revue Hittite et Asiatique.  
*RhM*: Rheinisches Museum.  
*RivFil*: Rivista di Filologia.  
*RM*: Römische Mitteilungen.  
*SBA*: Sitzungsberichte der Berliner Akademie.  
*SCIMC*: Short Communications of the Institute of Material Culture, U.S.S.R.  
*SEG*: Supplementum Epigraphicum Graecum.  
*SIG*: Dittenberger, Sylloge Inscriptionum Graecarum.  
*SO*: Symbolae Osloenses.  
*StEtr*: Studi Etruschi.  
*TAPA*: Transactions of the American Philological Association.  
*WS*: Wiener Studien.  
*WV*: Wiener Vorlegeblätter.  
*ZDMG*: Zeitschrift der Deutschen Morgenländischen Gesellschaft.  
*ZfE*: Zeitschrift für Ethnologie.  
*ZfN*: Zeitschrift für Numismatik.





PLATE I.—GRAECO-EGYPTIAN MASKS IN THE ROYAL ONTARIO MUSEUM





PLATE II. — GRAECO-EGYPTIAN MASKS IN THE ROYAL ONTARIO MUSEUM

R.O.M. 4.2874





PLATE III. — GRAECO-EGYPTIAN MASKS IN THE ROYAL ONTARIO MUSEUM





PLATE IV.—GRAECO-EGYPTIAN MASKS IN THE ROYAL ONTARIO MUSEUM





PLATE V.—GRAECO-EGYPTIAN PORTRAIT IN THE ROYAL ONTARIO MUSEUM



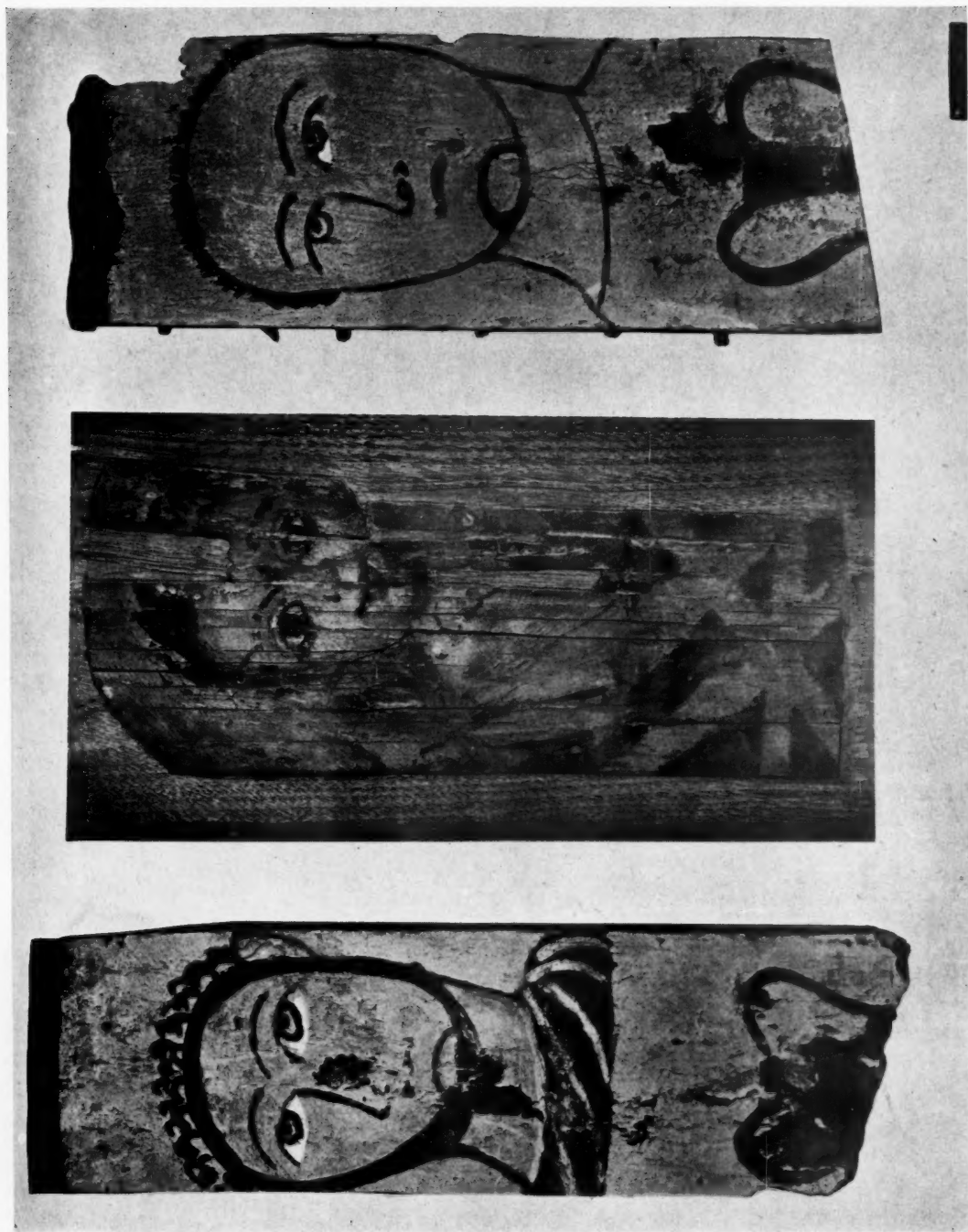


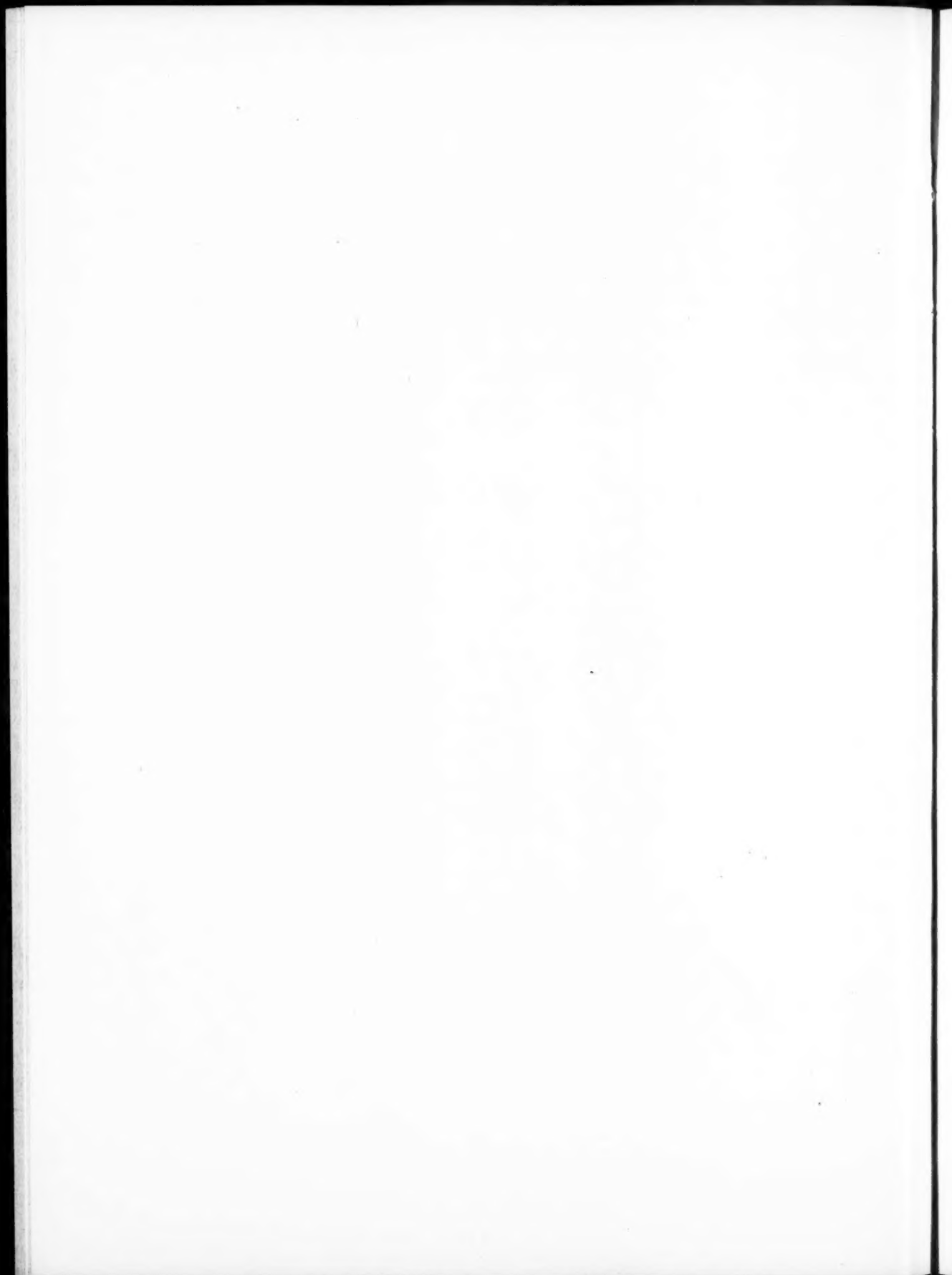
PLATE VI.—GRAECO-EGYPTIAN PORTRAITS IN THE ROYAL ONTARIO MUSEUM



## CONTENTS

|   |     |
|---|-----|
| BEAZLEY, J. D. The Brygos Tomb at Capua   | 153 |
| KOBER, ALICE E. Evidence of Inflection in the "Chariot" Tablets from Knossos                      | 143 |
| LITTLE, ALAN M. G. The Formation of a Roman Style in Wall Painting                                | 134 |
| RAUBITSCHKE, ANTONY E. Hadrian as the Son of Zeus Eleutherios                                     | 128 |
| RICHTER, GISELA M. A. Peisistratos' Law Regarding Tombs   | 152 |
| ROBINSON, C. A. Jr. The Zeus Ithomatos of Ageladas  | 121 |
| Archaeological News and Discussions—Stephen B. Luce   | 159 |
| Necrology   | 159 |
| General and Miscellaneous   | 160 |
| Egypt   | 163 |
| Mesopotamia   | 163 |
| Palestine   | 164 |
| Greece  | 164 |
| Roman Britain   | 167 |
| Early Christian and Byzantine   | 168 |
| Mediaeval   | 171 |
| Renaissance   | 173 |
| America   | 173 |
| Far East  | 177 |
| U.S.S.R.  | 177 |
| Book Reviews—Helen E. Searls  | 180 |
| Bibliography of Archaeological Books—1944—David M. Robinson                                       | 203 |
| Bibliography of Books that have Appeared since the Outbreak of the War: France,<br>Germany, Italy | 207 |







## THE ZEUS ITHOMATAS OF AGELADAS

ALL THAT is certainly known of the statue of Zeus Ithomatas by Ageladas of Argos<sup>1</sup> is contained in Pausanias' words<sup>2</sup> at the time of his visit to Messene: "The statue of Zeus is a work of Ageladas and was originally made for the Messenians of Naupaktos. A priest annually chosen keeps the statue in his house." We also learn from Pausanias that Zeus was held in particular reverence at Messene,<sup>3</sup> but more important for our discussion is his remark<sup>4</sup> that the oracle of Delphi warned the Lacedaemonians, at the time of their siege of the Messenians on Mt. Ithome, that retribution would surely overtake them if they harmed the men who had thrown themselves on the protection of Zeus of Ithome.

The Messenians ultimately received permission to leave the Peloponnesos, for the siege proved too much for Sparta, and with the aid of Athens they settled at Nau-paktos on the northern shore of the Corinthian Gulf (455 B.C.).<sup>5</sup> Soon after their arrival, no doubt, they discharged a vow by commissioning Ageladas to make a statue of Zeus Ithomatas. Except for Pausanias' statement that the statue was later brought to Messene, nothing else is known about it at all,<sup>6</sup> and, until a few years ago at least, sculptor and statue were simply regarded as irretrievably lost forever, as indeed are most Greek sculptors and their works.

I shall argue<sup>7</sup> that the people of Zankle-Messene in Sicily,<sup>8</sup> rejoicing in the newly-

<sup>1</sup> I follow Pape-Benseler (s. v.) in omitting the aspirate. Ageladas of Argos was the teacher of Myron (Pliny, *NH.* xxxiv, 57), Polykleitos (Pliny, *NH.* xxxiv, 55), and Pheidias (Schol. Aristoph., *Frogs.*, 504; Suidas, Γελάδης). Pausanias (vii, 23, 9-10) tells of two statues of Zeus Soter at Aegion (see *BMC. Pelop.*, pl. iv, nos. 12, 14, 17) and of other bronzes there by Argive sculptors, though he does not name them, and continues (vii, 24, 4): "There are other statues at Aegion made of bronze: Zeus represented as a child, and Herakles also beardless, a work of Ageladas the Argive" (see Head, *HN.*<sup>2</sup>, p. 413). There was clearly a strong Argive tradition at Aegion, connected particularly with statues of Zeus. Certain other statues were also attributed to Ageladas in antiquity (the evidence is brought together by Frazer in his commentary on Pausanias iv, pp. 438-441; see, too, Frickenhaus, *JdI.* xxvi, 1911, pp. 24 ff., who proposes an older and a younger Ageladas). This paper, however, is concerned exclusively with the famous statue of Zeus Ithomatas which was made by Ageladas not earlier (see below) than 455 B.C. Miss Richter must be wrong, therefore, in assigning this Ageladas to the archaic period (*The Sculpture and Sculptors of the Greeks*<sup>2</sup>, p. 196); nor is there any reason for some scholars to question (cf. p. 244, note 249) the chronological possibility of Ageladas having been the teacher of Polykleitos.

<sup>2</sup> IV, 33, 2.

<sup>3</sup> The Messenians claimed that Zeus was born there, and maintained a sanctuary for him on Ithome (iv, 33, 1); an annual festival was held in his honor (iv, 33, 2); a statue of Zeus Soter stood in the market place (iv, 31, 6); on the founding of their city the people sacrificed to Zeus of Ithome (iv, 27, 6).

<sup>4</sup> IV, 24, 7.

<sup>5</sup> Thucydides i, 103; Pausanias iv, 24, 7.

<sup>6</sup> Not quite, for certain coins of Messene have been regarded as depicting the statue in a general way. Miss Richter, who wrote before the discovery of the Artemision Zeus, illustrates (*op. cit.*, fig. 562) the coin which is usually assumed to portray best the Zeus Ithomatas, but I shall suggest another coin as a better example.

<sup>7</sup> I once devoted a paragraph to this general thought; see below, note 11. My article as a whole was directed toward some of the points suggested in note 40, below.

<sup>8</sup> After 460 B.C. Zankle, which had a mixed population, as well as a checkered history, and had been named Messene several decades earlier by Anaxilas of Rhegion, was regularly called Messene (*CAH.* v, p. 154). See Head, *op. cit.*, pp. 151 ff.



won freedom of their brothers at Naupaktos,<sup>9</sup> struck a coin soon after 450 B.C. which shows the Zeus Ithomatas. The statue, as we have learned from Pausanias, was later brought to Peloponnesian Messene,<sup>10</sup> exactly when is not known, but obviously after its foundation in 369 B.C. I shall next argue that the Messenians represented the Zeus Ithomatas on their coins and, finally, that the Artemision bronze statue,<sup>11</sup> so called from its chance discovery in 1926 in the waters off Cape Artemision in Euboea, is probably the Zeus Ithomatas. That is to say, we shall first face the difficulties raised by the coins of Zankle-Messene and Messene and then see what can be done with the idea that the Zeus Ithomatas and the Artemision Zeus are one and the same, for, even though the coins and the Artemision Zeus may not be irreconcilable, it does not follow automatically that the statue from Artemision is the Zeus Ithomatas. As a preliminary, I think it is fair to assume that the Artemision bronze is a statue of a god and not of an athlete, as some have stated, and that it does, in fact, represent Zeus. The statue itself makes this clear, but fortunately it has now been proved to the hilt by Mylonas.<sup>12</sup>

Somewhat after 450 B.C. the people of Zankle-Messene issued a remarkable tetradrachm which shows the figure of a god wearing a chlamys and wielding the thunderbolt.<sup>13</sup> Evans, after debating the possibility of Zeus, published the figure as Poseidon, an attribution questioned by Head.<sup>14</sup>

In view of the limited area available to the artist of the coin, the god's bent right arm presents no difficulty when compared with the Artemision Zeus,<sup>15</sup> but the thunderbolt and chlamys do. The thunderbolt is to be expected on a statue of Zeus, of course, but the Artemision figure lacks it, and there is no trace of a metal shaft ever

<sup>9</sup> Seltman (see below) also recognizes a feeling of kinship among Messenians. Pausanias (iv, 26, 2) says that "after the defeat of the Athenians at Aegospotami, the Lacedaemonians, being now masters of the sea, expelled the Messenians from Naupaktos also. Some of the exiles sailed to their kindred in Sicily and Rhegium."

<sup>10</sup> Presumably the statue was brought directly from Naupaktos, though Pausanias does not specifically say so. We must think of the Spartans driving the Messenians from Naupaktos after Aegospotami, but not daring to destroy the statue of the god. The Messenians remembered Naupaktos in other ways, too, for during their stay there they had borrowed from the Kalydonians the worship of Artemis Laphria, which they brought with them to the Peloponnesos (Pausanias iv, 31, 7).

<sup>11</sup> The chief studies of the Artemision bronze are as follows: Oekonomos, *Praktika of the Academy of Athens* 1928, pp. 750 ff.; Karouzos, *Δελτ.* xiii, pp. 40 ff.; Beyen, *La statue d'Artemision*, 1930; Jüthner, *AM.* lxii, 1937, pp. 136 ff.; Poulsen, *Acta Arch.* xi, 1940, pp. 1 ff.; Mylonas, *AJA.* xlviii, 1944, pp. 143 ff. See, too, Noack, *Antike* v, 1929, pp. 214 ff.; Herbig, *Gnomon* v, 1929, pp. 636 ff.; von Oppeln-Bronikowski, *Arch. Entdeckungen*, 1931, p. 92; Buschor, *Die Plastik der Griechen*, 1936; Gerard Young, *BSA.* xxxvii, pls. 26-30; Poulsen, *Acta Arch.* viii, 1937, pp. 139 ff.; Picard, *Manuel d'Archéologie grecque* ii, 1939, pp. 63 ff.; Raubitschek, *BSA.* xl, pp. 34 ff. (cf. *AJA.* xlv, 1941, p. 90); Robinson, *AJA.* xlv, 1942, pp. 75 ff. (cf. *CP.* xxxvi, 1941, p. 192).

<sup>12</sup> *Loc. cit.* Those who have argued for Poseidon must likewise yield to Mylonas. Raubitschek (*loc. cit.*) suggested that the statue may have stood originally in the Isthmian sanctuary of Poseidon, but it was no more than a conjecture.

<sup>13</sup> Evans, *Num. Chron.* 1896, pl. viii, 7; see, too, pp. 113 ff. It will be noticed that this figure has much the same build as the Artemision Zeus, which is not true of the Zeus on the Messenian coin illustrated by Miss Richter; see my note 6 and below.

<sup>14</sup> *Op. cit.*, p. 154, fig. 82; on p. 133 of the first edition Head suggested the possibility of Zeus.

<sup>15</sup> It is well known that differences of detail between a statue and its representation on a coin are to be expected; see, for example, the Sauroktonos on a coin of Nikopolis, Richter, *op. cit.*, fig. 673. Perhaps, too, we may recall Mr. Farley's postage stamp of Whistler's Mother with a bouquet of flowers on her lap.



having been held in the hollow of its right hand. But Mylonas argues convincingly<sup>16</sup> that the god once held a thunderbolt with a wooden shaft, and therefore the thunderbolt of the coin raises no problem.

The chlamys, on the other hand, presents a real difficulty, and were it not for Seltman I would not be able to offer anything satisfactory. The truth, probably, is the precise opposite of what Seltman believes it to be, but nevertheless his suggestion is thought-provoking:<sup>17</sup> "It was perhaps at the expulsion of the tyrant in that year (461?) that the city decided for a brief period to resume its old name of Zankle<sup>18</sup> and to issue coins with the old sixth-century dolphin type. But, probably with a view to conciliating the Messenian element in the population, the obverse of the tetradrachm bore a figure of Zeus Ithomatas, God of Ithome in Peloponnesian Messene, which at that very date was besieged by the Lacedaemonians. If we may regard this figure as a version of the actual statue of Zeus upon the mountain summit, and the altar in front of him as a symbol of the national hearth of the Messenian nation, then we have here one of the earliest coins with the device of a propagandist character. Messana-Zankle has just shed the tyrant's yoke: may Zeus of Ithome and his worshippers in Messenia likewise secure freedom." The coin, however, was not struck at the time of the siege of Ithome, but soon after 450 B.C.,<sup>19</sup> and in any case we have no knowledge of the appearance of an older statue of Zeus Ithomatas. Seltman's reasoning, none the less, persuades Mylonas<sup>20</sup> that the presence of the chlamys, an attribute of Poseidon, demands that even the god on the coin be identified as Poseidon, especially since Zankle was an ancient settlement of the Sikels and consequently a national center of Poseidon worship. "The eagle of the Ithomatas Zeus was omitted,"<sup>21</sup> Mylonas maintains, "and a chlamys was added in the coin type. In other words, an attribute of Zeus was replaced by one of Poseidon. Because of this interchange of attributes, it seems to us that the god on the coin should be identified as Poseidon. The god was given a thunderbolt instead of his trident and the general appearance of the Ithomatas Zeus 'to conciliate the Messenian element in the population.'"<sup>22</sup> Zankle-Messene, it must be emphasized, was a Greek state, though doubtless after the expulsion of the tyrants the Sikel population became more important. Thus, instead of following Seltman's suggestion that the figure of Zeus Ithomatas on the coin was a conciliatory gesture toward the Messenian element in the population, I propose that this obvious figure of Zeus wielding the thunderbolt does, nevertheless, wear a chlamys with a view to conciliating the Sikel element in the population.

The coin of Zankle-Messene, then, was issued soon after the Peloponnesian Messenians had settled at Naupaktos in 455 B.C.; it shows a Zeus, doubtless the Zeus Ithomatas which had recently been set up at Naupaktos and which the Sicilians now saluted; Zeus wields a thunderbolt, as the Zeus Ithomatas probably did; and Zeus wears a chlamys as a conciliatory gesture to the Sikel element in the popula-

<sup>16</sup> *Op. cit.*, p. 155.

<sup>17</sup> *Greek Coins*, p. 134.

<sup>18</sup> The inscription on the coin is an archaism; see Evans and Head, notes 13 and 14, above.

<sup>19</sup> Evans, *loc. cit.*

<sup>20</sup> *Op. cit.*, p. 158.

<sup>21</sup> We do not know that it ever had an eagle.

<sup>22</sup> That is to say, the chlamys makes him Poseidon; the thunderbolt and the general appearance of the Zeus Ithomatas make him Zeus. It seems to me that this adds up to Zeus and not Poseidon!



tion. Incidentally, there is nothing to suggest that the Artemision Zeus is not pictured on the coin and that, therefore, it is not the Zeus Ithomatas, but further discussion of that point must wait until the end.

Following the battle of Leuktra, the Messenians returned to their country, under the auspices of Epaminondas, and founded the city of Messene in 369 B.C. on the slopes of Mt. Ithome. Certain tetradrachms which they issued show a nude Zeus wielding the thunderbolt with his right hand and holding an eagle on the left.<sup>23</sup> There can be no doubt, in the light of the general information supplied by Pausanias, that this is the Zeus Ithomatas of Ageladas. Head's fig. 237 (after 330 B.C.) has been taken<sup>24</sup> as illustrating best the Zeus Ithomatas, but it is too slim, if we may compare it with the Artemision Zeus, and we should therefore prefer the stocky figure of the earlier coin (Head, fig. 236, 369–330 B.C.), which has the build of the Artemision Zeus and the Zeus on the coin of Zankle-Messene.<sup>25</sup> On the other hand, the fact that the Messenian coins have an eagle, and the Artemision Zeus does not,<sup>26</sup> presents a difficulty when we compare the two. But this much is certain: the eagle on the Messenian coins is a movable feast.<sup>27</sup> A glance at the plate of Messenian coins in the British Museum Catalogue<sup>28</sup> shows that two coins, nos. 1 and 6, have the eagle on the left hand; another coin, no. 7, has the eagle on the left forearm; and yet another, no. 10, has the eagle on the upper left arm, and its head is actually turned back at the god (the plate shows other curious portrayals of the eagle). Is the eagle of the Messenian coins merely a numismatic invention and tradition?<sup>29</sup> It appears so; indeed, it is so, if we have been correct in arguing that the coin of Zankle-Messene, which has no eagle, represents the Zeus Ithomatas. We may say, then, that there is nothing about the Messenian coins, which show the Zeus Ithomatas, to suggest that the Artemision Zeus is not pictured upon them and that, therefore, it is not the Zeus Ithomatas, but further discussion of this point must once again be briefly postponed.

I do not examine Mylonas' article in detail, because all of it, except for the final paragraph,<sup>30</sup> is a discussion of whether the bronze statue from Artemision is a Zeus or Poseidon or athlete. But at the end, having shown that it is a statue of Zeus (which I accept), he says that it is not the statue of Zeus Ithomatas by Ageladas, though "it must be attributed to the workshop of that great master. Even if we disregard the way in which the hair of our statue is rendered and the absence of the eagle, its discovery off the coast of Artemision will prevent us from suggesting that

<sup>23</sup> Head, *op. cit.*, p. 431, fig. 236; p. 432, fig. 237; *BMC. Pelop.*, pl. xxii. Nearby Thuria also issued coins showing the Zeus Ithomatas, Head, p. 433. <sup>24</sup> See above, note 6. <sup>25</sup> Evans, *loc. cit.*

<sup>26</sup> The well known Dodona Zeus in Berlin does not have an eagle; it is discussed by Mylonas (*op. cit.*, p. 149, with other examples).

<sup>27</sup> In this connection it seems to me important to compare *BMC. Pelop.*, pp. 18, 19, pl. iv, nos. 12, 14, 17. The statue, fixed on a base, of a beardless Zeus wielding the thunderbolt is taken to be that of Zeus Soter at Aegion, mentioned by Pausanias vii, 23, 9. The posture of the eagle on nos. 12 and 14 is quite different (and see Head, *op. cit.*, p. 413); and on no. 17 the eagle (or what I take to be an eagle, for the coin is worn) is actually flying above the left arm (in any case, not standing on the left hand or arm, as the description states) — otherwise, there is no eagle on the coin.

<sup>28</sup> See above, note 23.

<sup>29</sup> As already mentioned, the artists vary considerably in representing the physique of Zeus. Concerning other vagaries of the artists of the Messenian coins, see my remarks below on the treatment of the hair of Zeus and his diadem.

<sup>30</sup> *Op. cit.*, p. 160.



the statue is that of the Ithomatas Zeus by Hageladas. Alexander Robinson has tried to overcome this difficulty by suggesting that the boat in which the bronze was stored had started from the west coast of the Peloponnesos and was on its way to Constantinople when it was shipwrecked off the coast of Artemision. We doubt that this explanation could be proved correct, because ever since the time of Nestor the regular routes between these two points were by way of the Cyclades and the islands off the coast of Asia Minor . . ." and the reference is to a passage in the *Odyssey*. Now, as far as our problem is concerned, I am willing to grant anything at all about regular routes, for I think there will be general agreement that for some reason or other a particular boat may stray off the regular course — perhaps this boat actually did stray and accordingly came to grief. But I have no knowledge how the boat carrying the Artemision Zeus ever got to Euboea<sup>31</sup> or where it was headed, though I think it a fair guess, based on what we know to have happened often, that it was carrying objects of art for the embellishment of Constantine's new capital. In this connection we must mention Mylonas' remark that "it should also be noticed that with the statue were found some sherds which tentatively were placed in the Hellenistic period.<sup>32</sup> This, of course, would exclude Constantinople as the destination of the galley with its treasures," though it would not exclude Byzantium and a good many other places as well. On the other hand, I have been told by a scholar who has seen the sherds that they are nondescript and can date from practically any period at all, fourth century before Christ to fourth century after Christ. If the scholars on pottery should ultimately agree on a Hellenistic date for the vases, the case for a statue seen by Pausanias is not weakened, inasmuch as the boat was clearly carrying objects of art (including a Hellenistic bronze horse and rider), among which vases might appropriately be stored and probably were. Finally, there is Mylonas' singular reference to the rendering of the hair of the Artemision Zeus. I do not know what can be done with the subject, for no one can state categorically that a detail of this coin, but not of that, truly represents the Zeus Ithomatas; and yet a glance at the plate of Messenian coins in the British Museum Catalogue<sup>33</sup> will show different ways of treating the hair: compare no. 1 with no. 10 and both with the coin of Zankle-Messene; <sup>34</sup> in addition, the Zeus of Messenian coin no. 6 wears a diadem, while no. 1 does not.

Is the Artemision Zeus in fact the Zeus Ithomatas? We shall never certainly know, for there is no signature on the statue. On the other hand, there is nothing in the available evidence to forbid the identification, while much suggests it. The evidence for the Zeus Ithomatas is, unhappily, not clear cut, but only rarely are we in the fortunate position of being able to identify a statue, and then it is chiefly a business of piecing together bits of information. For instance, we are apt to take the identification of the Doryphoros for granted, but it may be well to recall the evidence as

<sup>31</sup> Mylonas (*ibid.*) believes that the place of finding indicates that the statue "was originally standing in some northern city of the Greek world"; this dovetails with a theory that he has developed (p. 159), the substance of which is that "representations of Zeus hurling the thunderbolt without the eagle seem to have formed a northern group, and were inspired by northern traditions" — which may be true, but it is not central to our problem, as, for example, the coin of Zankle-Messene will suggest.

<sup>32</sup> Karouzos (*op. cit.*, p. 94, note 1) suggests an early Hellenistic date; Herbig (*op. cit.*, p. 637), first century before Christ.

<sup>33</sup> See above, note 23.

<sup>34</sup> Evans, *loc. cit.*



Miss Richter presents it: <sup>35</sup> "Pliny describes one of Polykleitos' works as 'a boy of manly form bearing a lance, called "the Canon" by artists, who draw from it the rudiments of art as from a code (so that Polykleitos is held to be the only man who has embodied art itself in a work of art).' This together with Pliny's statements that a characteristic of Polykleitos' statues is 'the way they step forward with one leg' and that Varro thought that 'they are squarely built and seem almost to be made on a uniform pattern,' have enabled archaeologists to identify a type preserved in several replicas as Polykleitos' famous statue."

Unfortunately, we have no such descriptions for the Zeus Ithomatas, but the evidence nevertheless is both abundant (relatively speaking <sup>36</sup>) and extraordinary. It is abundant because we have Pausanias' statement, which says in effect that Ageladas' statue of Zeus Ithomatas, once set up by Messenian exiles at Naupaktos, was considered of sufficient importance by a much later generation of Messenians to move to their new city; and because we have the coins of Zankle-Messene and Messene. You cannot put it to a jury, but I think Greek history strongly suggests that a picture of Zeus Ithomatas on coins of Zankle-Messene (issued soon after the settlement at Naupaktos) and Messene (issued soon after the founding of Messene) is inevitably the picture of the statue which symbolized the hard-won freedom of the Messenian exiles at Naupaktos. The evidence, moreover, is extraordinary because we have Messenians in the Peloponnesos, at Naupaktos, and in Sicily; and we know the exact date of their arrival at Naupaktos and the exact date of the founding of Messene. The purpose of this paper has been to show how these various bits of information elucidate the Zeus Ithomatas and how, at the same time, they do not rule out, but tend to confirm, the Artemision Zeus as the Ithomatas. Granted, on the basis of Mylonas' argument, that the Artemision statue represents Zeus, and that it originally held a thunderbolt, we then find it accurately portrayed on a coin of Zankle-Messene (for the chlamys is an addition of local political import and does not appear at Messene) and on coins of Messene (for the eagle, missing at Zankle-Messene, here appears to be an artist's invention). The Artemision Zeus, moreover, is a very great statue—great for any period, and deemed important enough by the ancients to carry away from Greece—and it is difficult to believe that it was not a famous statue in antiquity and that it would leave no trace in the literature or coins.

Important support, too, can be found in yet another quarter, though I have been slow <sup>37</sup> to recognize it. Beazley remarks <sup>38</sup> that "the original of the Choiseul-Gouffier Apollo in London <sup>39</sup> must have been of the same school as the Zeus from Artemision." Not only is the resemblance striking, particularly when we bear in mind that

<sup>35</sup> *Op. cit.*, p. 245. On p. 205 Miss Richter gives Lucian's "detailed account" (two sentences) for the identification of the Diskobolos, an account "so different from the brief, generalized statements in which ancient writers mostly refer to Greek sculpture." The Doryphoros and Diskobolos are, of course, Roman copies, and it is a fact that we have been unable to identify the sculptor of hardly a single great, substantive, unsigned original.

<sup>36</sup> We are not told as much about Pheidias' Anadoumenos, to cite one of many possible examples.

<sup>37</sup> *Loc. cit.*

<sup>38</sup> Beazley and Ashmole, *Greek Sculpture and Painting*, p. 34 and fig. 67. Beazley, however, dates the Artemision Zeus to 470–460 B.C.

<sup>39</sup> *Marbles and Bronzes in the British Museum*, pl. iii, ca. 460 B.C.



one is an Apollo and the other a Zeus, but the Choiseul-Gouffier Apollo,<sup>40</sup> as is commonly known, is an Argive work that definitely anticipates the Doryphoros. As Beazley puts it,<sup>41</sup> both express "the idea of giving the impression of life by means of the alternation and contrast of tense and relaxed." And the Doryphoros, we know, is by the pupil of Ageladas.

BROWN UNIVERSITY

C. A. ROBINSON, JR.

<sup>40</sup> Very many other works resemble the Artemision bronze; indeed, it is not at all difficult to find provocative parallels from Euboea, Athens, Olympia, the West and elsewhere. A dramatic example is the Omphalos Apollo, which Karouzos (*op. cit.*, pp. 90 ff.) recognized and which led him on the basis of style to argue for Kalamis as the sculptor of our statue. Subjective criticism has its place, and a very important place it is, but it also has its pitfalls, and without something more tangible than style to go on, endless and plausible conjectures are possible, as the history of Greek scholarship shows (cf. above, note 11). The style of the Omphalos Apollo does in fact suggest Kalamis as the sculptor of the Artemision statue—and Raubitschek (*loc. cit.*) asserts that Karouzos' identification is correct—but I can imagine other arguments and assertions erected as easily on other parallels, whereas, as I have tried to demonstrate, history and coinage combine with style to make a substantial case for Ageladas' Zeus Ithomatas. Though a thorough study of the transitional period is greatly needed, I think a necessary first step, after tying down as many individual statues as possible, is a careful examination of a large group of works (sculpture and coins) which seem to have definite, albeit tantalizing and elusive, affinities. A good starting-place is the archaic temple of Apollo Daphnephoros at Eretria (cf. my remarks in *CW*, xxxiii, p. 219). Thence the trail—and as I said (*CW*, xxxvi, pp. 224 ff.) in my review of Miss Richter's great *Kouroi*, it is literally a case of a migration of refugee artists—leads westward, where Ashmole's *Late Archaic and Early Classical Greek Sculpture in Sicily and South Italy* is fundamental. The trail then returns to the Peloponnesos and Athens (see above, note 7).

<sup>41</sup> *Op. cit.*, p. 43.



## HADRIAN AS THE SON OF ZEUS ELEUTHERIOS

THREE of the five fragmentary inscriptions honoring the Emperor Hadrian which were found on the Athenian Akropolis<sup>1</sup> are part of one and the same pedestal. A comparison of the squeezes of *IG. ii<sup>2</sup>*, 3312, 3321, and 3322 shows that these fragments belong together and probably join (fig. 1).<sup>2</sup> The original thickness seems to be preserved only on *IG. ii<sup>2</sup>*, 3312 (0.17 m.) and 3321 (0.20 m.), while 3322 is reported as *undique truncatum* (thickness, 0.18 m.). It may be assumed that the fragments belong to the inscribed front face of a large square pedestal. This pedestal consisted



FIG. 1a  
*IG. II<sup>2</sup>* 3321



FIG. 1b. — *IG. II<sup>2</sup>* 3312 + 3322

not of one solid block, but of a stone core which was enclosed by four upright plaques and surmounted by a profiled top stone which carried the statue. Such a construction would explain the difference in thickness between *IG. ii<sup>2</sup>*, 3312 (0.17 m.) and 3321 (0.20 m.). The former belongs to the right edge of the plaque which was joined to the stone forming the right lateral side of the pedestal. It was therefore somewhat thinner, and the back was probably more carefully dressed. The other two fragments (*IG. ii<sup>2</sup>*, 3321 and 3322) belong to the middle of the plaque where the thickness was greater and the back less carefully dressed.<sup>3</sup>

<sup>1</sup> *IG. ii<sup>2</sup>*, 3311, 3312, 3314, 3321, 3322.

<sup>2</sup> The height of *IG. ii<sup>2</sup>*, 3312 is 0.43 m. and the width, 0.18 m. *IG. ii<sup>2</sup>*, 3321 is now kept in the Epigraphical Museum of Athens and has the Inventory Number EM 4739.

<sup>3</sup> For this type of base, which was commonly used as an altar, see H. A. Thompson, *Hesperia* vi, 1937, pp. 110–111; *ibid.* vii, 1938, p. 617, fig. 5; W. B. Dinsmoor, *Hesperia*, Supplement v, pp. 106–108.



The text of the three joining fragments can now with certainty be restored as follows (fig. 2):

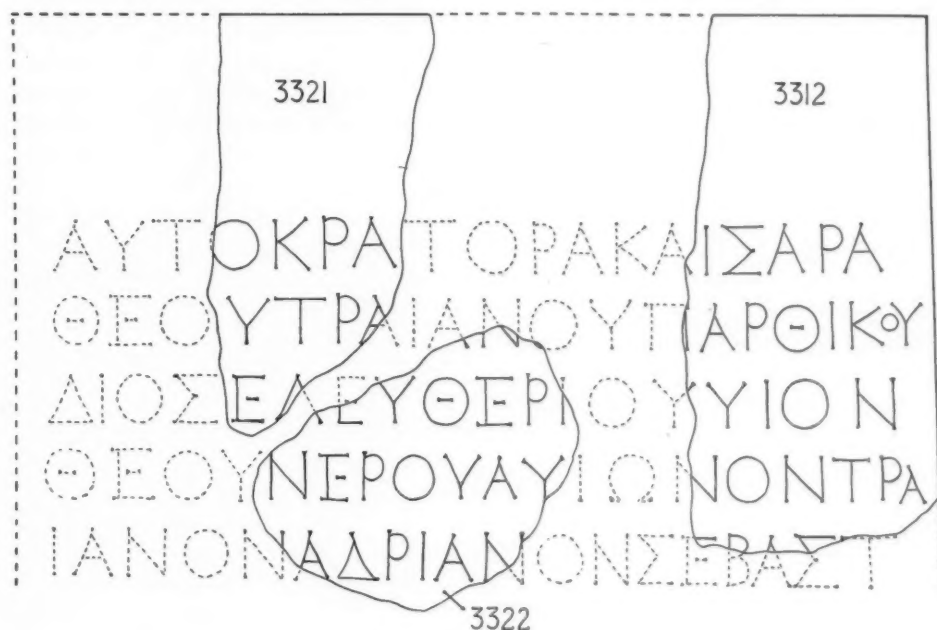


FIG. 2. — *IG. II<sup>2</sup>, 3312 + 3321 + 3322*

[Αὐτ]οκρά[τορα Κ]αίσαρα  
 [Θεο]ῦ Τρα[ι]ανοῦ Τ[α]ρθικοῦ  
 [Διὸς] Ἐλευθερί[ου] υἱὸν  
 [Θεο]ῦ Νέρουα υἱ[ω]νὸν Τρα  
 [ιανὸν] υἱ Ἀδριαν[ὸν Σ]εβαστ[ὸν]  
 [ - - - - - ]

The original width of the front plaque was *ca.* 0.63 m. and the height can hardly have been much less than the width. The pedestal was therefore of considerable size; it was, in fact, larger than either *IG. ii<sup>2</sup>, 3311* or *3314*.<sup>4</sup> This consideration is of some importance because one of the three pedestals from the Akropolis may be the base of the statue of Hadrian which was set up in the Parthenon.<sup>5</sup> Both *IG. ii<sup>2</sup>, 3311* and *3314* have been at different times identified as the base of this statue, but the claim of the inscription published here seems to be better, not only on account of its monumental size but because of its text.

The new inscription contains a unique phrase which is more easily explained if one were to assume that it stood on a monument erected in the Parthenon near the

<sup>4</sup> The width of *IG. ii<sup>2</sup>, 3314* is 0.75 m. but the height of its letters is only 0.022 m. as compared with 0.034 m. on *IG. ii<sup>2</sup>, 3312 + 3321 + 3322*.

<sup>5</sup> See P. Graindor, *Athènes sous Hadrian*, pp. 57–58 and note 1 on p. 58.



famous statue of Athena. This goddess is often designated as the daughter of Zeus (παῖς Διὸς or κόρη Διός), and the Emperor is here addressed as the son of Zeus Eleutherios ([Διὸς] Ἐλευθερί[ο]υ υἱός); this would make him a brother of the goddess Athena.<sup>6</sup>

Even more important than this possible link between the Emperor and the Goddess is his connection with Zeus Eleutherios. A great deal has been written on the identification of Hadrian as Zeus the Liberator in Athens and elsewhere.<sup>7</sup> The evidence for Athens is confined to a passage in Pausanias (i, 3, 2) and to two inscriptions (IG. ii<sup>2</sup>, 1075, line 17; 3322). Pausanias, speaking of the Stoa of Zeus in the Agora, says: ἐνταῦθα ἔστηκε Ζεὺς ὀνομαζόμενος Ἐλευθέριος καὶ βασιλεὺς Ἀδριανός, ἐς ἄλλους τε ὧν ἦρχεν εὐεργεσίας καὶ ἐς τὴν πόλιν μάλιστα ἀποδεξάμενος τὴν Ἀθηναίων. This passage indicates the association of the Emperor with Zeus but it obviously does not support the assumption that the statue was set up to the Emperor as Zeus Eleutherios.<sup>8</sup> One of the two inscriptions once thought to supply the desired evidence (IG. ii<sup>2</sup>, 1075, line 17), must now be discarded, since its fragmentary state does not permit certain restoration.<sup>9</sup> There remains only IG. ii<sup>2</sup>, 3322 (IG. iii, 492), here joined to IG. ii<sup>2</sup>, 3312 and 3321, and this fragment bears witness to the fact that Hadrian was called the son of Zeus and was not identified with Zeus Eleutherios.<sup>10</sup> The Emperor received in Athens, and perhaps for the first time, the attributes Ὀλύμπιος, Σωτήρ, Κτίστης, and these attributes connect him closely with both Zeus Olympios and Zeus Soter (= Eleutherios). On the other hand, there seems to be no evidence available to support the assumption that Emperor Hadrian was identified in Athens with Zeus Eleutherios.

The inevitable conclusion is that it was Hadrian's father by adoption, Trajan, who was called Zeus Eleutherios in the Athenian inscription. In a similar case, Tiberius is called νέος Σεβαστὸς θεοῦ Διὸς Ἐλευθερίου Σεβαστοῦ υἱός.<sup>11</sup> The reason for this identification may be hard to understand, especially since we know little of the reasons for the identifications of other Roman Emperors with Zeus Eleutherios.<sup>12</sup> In Athens, Zeus Eleutherios was the god worshipped as the liberator of the city from

<sup>6</sup> See P. Graindor, *op. cit.*, p. 11.

<sup>7</sup> The evidence outside Athens has been conveniently assembled by P. Graindor, *op. cit.*, p. 169, notes 2-5; A. B. Cook, *Zeus* ii, pp. 97-98, note 3. See also IGR. i, 607 (Tomis), 785 (Heracleae); iv, 84, 89 (Mytilenis); IG. xii, 2, 156, 183, 185, 191-198, 214; Supplement (1939), p. 20, no. 53 (Mytilenis). In all these inscriptions the Emperor is called Ἐλευθέριος, but not Ζεὺς Ἐλευθέριος. The attribute Ἐλευθέριος is joined to others like Ὀλύμπιος, Σωτήρ, Κτίστης, and one may wonder whether Hadrian was really worshipped as Zeus Eleutherios; compare Jessen, *RE*. s.v. *Eleutherios*, cols. 2350-2351; Ziegler in Roscher's *Lexikon der Mythologie*, s.v. *Zeus*, col. 622, lines 55-56. It should be noticed, incidentally, that C. Edson's interpretation of the cult of Zeus Eleutherios and Roma in Macedonia (*HSCP*. li, 1940, p. 135) is preferable to G. W. Elderkin's recent suggestion (*Arch. Papers* v, p. 6, note 32).

<sup>8</sup> See P. Graindor, *op. cit.*, pp. 57 and 167. For the recovery of the statue and its base, see below Appendix 1.

<sup>9</sup> See J. A. Oliver, *Hesperia* x, 1941, p. 88; compare Busolt-Swoboda, *Griech. Staatskunde*, p. 936; A. D. Nock, *HSCP*. xli, 1930, pp. 32-33; H. A. Thompson, *Hesperia* vi, 1937, p. 76, note 3.

<sup>10</sup> See P. Riewald, *Diss. Phil. Halenses* xx, 1912, p. 332, note 2.

<sup>11</sup> See P. Riewald, *op. cit.*, p. 289, no. 5.

<sup>12</sup> See P. Riewald, *op. cit.*, pp. 287-292; A. B. Cook, *Zeus* ii, pp. 97-98, note 3; P. Graindor, *Athènes de Tibère à Trajan*, p. 115.



the Persian attack, and it may well be that Trajan, who fought against the descendants of the old Persians, the Parthians, received the epiklesis Zeus Eleutherios after his victories over the Parthians.<sup>13</sup> If this interpretation should be correct, one might wonder why Trajan is not more often called by this name.<sup>14</sup> Yet, news of Trajan's conquests probably reached Athens not long before the death of the Emperor became known, and one should therefore not expect that any statues were erected in his honor in Athens during this short space of time. It is surprising, however, that only one of the Athenian inscriptions which contain the name of Hadrian's father should give Trajan the title Zeus Eleutherios.<sup>15</sup> Only one of these documents (*IG. ii<sup>2</sup>, 3287*) is earlier than 132 A.D.,<sup>16</sup> and it may be that the inscription under discussion was engraved when the Parthian victories of Trajan were still fresh in the memory of the Athenians. Or, it could be that in this dedication, which may have been set up in the Parthenon, Trajan was called Zeus Eleutherios because his son was associated with the daughter of Zeus, Athena.

### APPENDIX I

#### HADRIAN'S STATUE IN FRONT OF THE STOA OF ZEUS

Fragment of Pentelic marble, found on May 29, 1936, in Section N of the Agora Excavations. The stone is broken at the left side and at the bottom, and it shows traces of later use.

Height, 0.61 m.; width, 0.94 m.; thickness, 0.635 m.

Height of letters, ca. 0.055 m.

Inv. No. I 4188

ca. 132 A.D.

[Αὐτοκράτορα Καίσαρα]  
[Τραιανὸν Ἀδριανὸν]  
[Σεβαστὸν Ὀλύμπιον]  
[ca.6]δας Βυζάντιος  
[τὸν ἐα]ντοῦ καὶ τῆς  
[πατρί]δος εὐεργέτην.

The inscribed face and the top have already been illustrated by T. L. Shear, *Hesperia* vi, 1937, p. 353, figs. 16 and 17. Shear also discussed the possibility that this may have been the pedestal of the big marble statue of the Emperor which was found in the same region.<sup>17</sup> Whatever may be the verdict on this combination, it obviously is not in keeping with the assumption that the marble statue should be identified with the Emperor's image which stood in front of the Stoa of Zeus. For the inscription reveals clearly that the monument is a dedication made by a citizen of Byzantium. It therefore belongs in one group with several similar documents

<sup>13</sup> See N. C. Debevoise, *A Political History of Parthia*, pp. 211-212.

<sup>14</sup> The inscriptions of only three statues of Trajan have so far come to light in Athens, *IG. ii<sup>2</sup>, 3284*, *3284a*, and *3285*. A new restoration for *IG. ii<sup>2</sup>, 3285* is suggested below, Appendix II.

<sup>15</sup> *IG. ii<sup>2</sup>, 3287*, *3289*, *3299*, *3302*, *3309*, *3312* + *3321* + *3322*.

<sup>16</sup> See W. K. Pritchett, *The Five Attic Tribes after Kleisthenes*, p. 37.

<sup>17</sup> See T. L. Shear, *Hesperia* ii, 1933, pp. 178-183, no. 5, and plate VI.



(*IG.* ii<sup>2</sup>, 3289–3307, 3310). Almost all of these statues erected by or on behalf of foreign cities were set up in the sanctuary of Zeus Olympios.<sup>18</sup> One of them, however, *IG.* ii<sup>2</sup>, 3296, was discovered in front of the temple of Hephaistos in the Agora, thus in the same area where the inscription under discussion was found.

The dedicator of this statue was from Byzantium, and the closing phrase of the inscription (τῆς [πατρί]δος εὐεργέτην) seems to indicate that he was an official representative of his city. We know of only one embassy sent by Byzantium to Hadrian, and it may be that it should be connected with the inscription published here. Philostratos reports (*Vit. Soph.* i, 24, p. 530), speaking of the philosopher Markos of Byzantium, ἡγάσθη αὐτὸν καὶ Ἀδριανὸς ὁ αὐτοκράτωρ πρεσβεύοντα

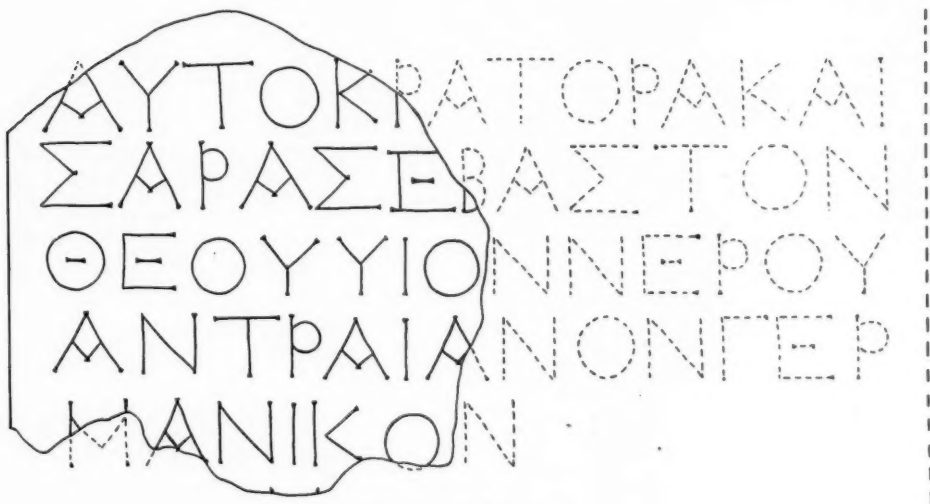


FIG. 3. — *IG.* ii<sup>2</sup>, 3285

ὑπὲρ Βυζαντιῶν.<sup>19</sup> Unfortunately, the name of Markos cannot be restored in our inscription unless it is assumed that Markos was only the *praenomen* of the famous sophist whose full name might have been [Μ(ᾱρκος) --]δας. Or, more likely, it may be that [ca. 6]δας was the leader of the embassy to which the distinguished scholar belonged.

## APPENDIX II

### *IG.* ii<sup>2</sup>, 3285

The inscription was found on November 10, 1837, north of the Erechtheion, and was first published by K. S. Pittakes, *Ἐφ.* 1853, no. 1915, who did not recognize the significance of the text. O. Lueders copied the text again, some years later, and his copy was published in *IG.* iii, 463, and republished in *IG.* ii<sup>2</sup>, 3285. In this last pub-

<sup>18</sup> See the commentary on *IG.* ii<sup>2</sup>, 3289.

<sup>19</sup> See *RE.* s.v. *Byzantion*, col. 1139, lines 27–31; s.v. *Markos*, cols. 1853–1854; P. Graindor, *Athènes sous Hadrien*, p. 64, note 2.



lication it was stated that the fragment is *undique truncatum* but a study of the squeeze and of the text reveals that the left edge must be preserved.<sup>20</sup>

Αὐτοκρ[άτορα Καί]  
 σαρα Σεβ[αστόν]  
 Θεοῦ υἱὸ[ν Νέρου]  
 αν Τραια[νὸν Γερ]  
 μανικὸ[ν - - - ]  
 [ - - - - - ]

This restoration differs from the one given in *IG. ii<sup>2</sup>, 3285*, inasmuch as it omits the word Θεόν after Σεβ[αστόν] in the second line. The addition of this word, although it is attested by *IG. ii<sup>2</sup>, 3284*, is unnecessary. This restoration is, moreover, excluded by the known length of the line (fig. 3) which can be determined from the certain completion of lines 3 and 4. In type, this inscription resembles most closely *IG. ii<sup>2</sup>, 3284a* which was found in the Agora (*Hesperia* iii, 1934, p. 74, no. 72). The length of the lines is the same, and the lettering is similar both in form and in size.

INSTITUTE FOR ADVANCED STUDY

ANTONY E. RAUBITSCHKE

<sup>20</sup> The stone is now kept in the Epigraphical Museum and has the Inventory Number EM 4639.



## THE FORMATION OF A ROMAN STYLE IN WALL PAINTING

SINCE 1882, the year when August Mau published his *History of Decorative Wall Painting in Pompeii*, the question of the origin of the four styles which he was the first to distinguish has been a moot point among archaeologists. Mau himself assigned to each a home outside Italy; to the first or Incrustation style, Alexandria of the third century B.C.; to the second or Architectural, "one center or in different phases different centers contemporaneously" in the Near East; to the third, or Ornate, Alexandria in the time of Augustus; to the fourth or Intricate, "possibly Antioch."<sup>1</sup> Subsequent work, however, based on greater evidence, has modified this part of his account.<sup>2</sup> His theory of foreign origin has become unnecessary except for the first style, and the development of Pompeian painting is now explicable as a self-conditioned evolution, proceeding without sudden interruption and passing almost imperceptibly from style to style.

But if there is no interruption in the content of this evolution, there is at one point an all-important change in technique. This is the introduction with the second style of representational painting as the sole decorative method of giving meaning to the wall. For reasons which will be apparent as we proceed, it is perhaps no exaggeration to say that with this moment a new outlet for Roman creative originality comes to light and that in the gradual formation of a painted style the last chapter of Hellenistic architectural decoration is finished and the way opened for a new genuine pictorial Roman art. The purpose, therefore, of the present article is to trace the steps in the formation of this new art, for it is only by a careful analysis that the intertwining offshoots of a decaying Hellenistic tradition can be separated from the sturdier Roman growth. In making this analysis our chief criterion will be the gradual rise and spread of pictorialism over the originally architectural Pompeian wall.

### HELLENISTIC ARCHITECTURALISM AND ITALIAN EXPERIMENT

Already before the settlement of a Roman colony in Pompeii in 80 B.C. the Hellenized Oscans of the city had adopted as the decoration of their houses the standard Hellenistic form found also in the Near East, Athens and South Russia.<sup>3</sup> The pleasing geometrical regularity of this structural style disguises its essentially false decorative assumptions when applied to an interior, for its method, in fact, consists of representing the inner walls of the house as little different from those on the outside. The chief distinction in the treatment of the two is as follows: on the exterior the rough core of construction is covered by a sheath of actual stone, finely dressed and finished with marble stucco; the interior wall, on the other hand, has

<sup>1</sup> A. Mau, *Pompeii, its Life and Art*, New York, 1902, pp. 461-469.

<sup>2</sup> For a bibliography of recent work see H. G. Beyen, *Die Pompejanische Wanddekoration vom zweiten bis zum vierten Stil*, the Hague, 1938, pp. 13-14.

<sup>3</sup> The clearest account of the Hellenistic structural style is given in Miss Swindler's *Ancient Painting*, pp. 324-7. Rostovtzeff in the *Journal of Hellenic Studies* xxxix, 1919, p. 150, takes issue with Mau's term Incrustation, for this style, reserving the word for marble inlay. The term *crusta* itself, however, fitly describes this type of structural facing.



only a stucco sheath, moulded into blocks which resemble stone construction and which are picked out by painting to give a somewhat richer effect. Polychrome slabs are the rule, and even rare forms of marble are sometimes imitated.

The style in Pompeii shows already Western peculiarities, the result of local conditions, but there is no mistaking its predominantly Hellenistic and architectural tone. These local variations spring from an application in Pompeii over areas larger than in the more modest Eastern examples, for the style is used in the city to cover the high walls of the Italic atrium and also its large peristyle courts. The stucco blocks have a fairly fixed distribution, being applied above a high podium socle. The Italian style shows a marked preference for vertical rather than horizontal effects as in the East. It is fond, too, of spatial experiments, including false windows, which break the structural monotony, and pseudo-loggias, which appear to withdraw the structural surface a little from view, thus mitigating its protrusive quality. But in a palatial house like that of the Faun the weakness of the method as interior decoration is clear. Effective enough on a small scale, when the scale is too large, as in that house, the style is clumsy and awkward.

The range of pictorialism on such a wall is, of course, quite limited. Apart from the polychrome and marbled effects, pictorialism is confined to an occasional band of architectural ornament, such as maeanders, foliage, Erotes. The first style room, however, is not without actual pictures, but they must be sought in a curious place, upon the floor, in panels of mosaic set into the center and reproducing at times masterpieces of past painting. This is evidence that the taste of the period regarded them as out of place on the architectural wall. At the same time a dissatisfaction with the narrow range of its architecturalism is noted by Mau. "In isolated cases," he writes, "we find a pictorial representation on the surface of one of the blocks painted in imitation of marble, as if the veins had run together into a shape suggestive of marble, as a bird or a vase; in one instance, curiously enough, a wrestling match is outlined between Hercules and Antaeus."<sup>4</sup> Such efforts to torture marble into designs cannot have been too frequent, but show a new movement already at work.

#### HELLENISTIC SCENOGRAPHY AND ROMAN EXPERIMENT

In the same house, where the awkwardness of this style is so apparent, occur the first experimental steps of its successor, the so-called Architectural style. That this name is something of a misnomer, if applied to the whole development, will appear below, but it is an apt enough description of its initial content. The style, as I have shown previously in this JOURNAL and Beyen has since confirmed, was formed by taking over, first, the technique, and then, gradually, the content of Hellenistic scenography and moulding them to create a novel and princely method of decoration for the aristocratic or even bourgeois Roman house.<sup>5</sup> The immediate attraction of the technique—its power of suggesting perspective—furthered the spatial experiments just mentioned in the Italian structural style and permitted the inclusion on a

<sup>4</sup> Mau, *op. cit.* p. 472.

<sup>5</sup> *AJA* xxxix, 1935, pp. 360-371; also my articles in the *Art Bulletin* xviii, 1936, pp. 407-418, "Scaenographia" and xix, 1937, pp. 487-495, "Perspective and Scenepainting." Beyen, *op. cit.*, pp. 97-207 analyzes in full the contribution of the theater to the second style.



smaller scale in painting of the whole architectural pattern, including the podium socle. The technique itself, it must be noted, was nothing new, having been familiar for some time on the stages of the Hellenistic East and of South Italy.

But the elaboration of the content of scenography into a domestic wall style is quite another matter from the adoption of a mere spatial technique. It is a creative process in itself, a Roman achievement of the late Republic, the experimental steps of which are traceable only at Rome and Pompeii. For another reason also the rise of the style at this particular time is no accident. It marches with a second series of Roman experiments, those of the architects with concrete in vault building.<sup>6</sup> This new medium was to carry the Romans far beyond the traditions of the Hellenistic Greeks and was producing at this period a revolution in interior decoration. The age of the vault had begun and already had its reflection in the private house. The timid arches of the first style vaulting were being replaced by other forms, which reduced the height of the side walls and contracted appreciably the actual cubic space which they enclosed. The room thus shrank and some form of compensation was needed to keep the spacious atmosphere of the older style. This the scene painter could supply, if only in illusion, by painting. Thus, while the ceiling was actually becoming lower, the walls appeared to open out, and from the concurrence of these two factors, emerged a new wall style, itself an Italian invention, but part also of a major movement, the transformation of a Hellenistic into a genuine Roman interior.

How, then, did the new technique employed for these reasons become a decorative medium, and how did theatrical painting yield to a genuine pictorial wall style? The transition was accomplished in three phases, each of which becomes progressively more pictorial and less architectural as it advanced.

#### PICTORIAL ARCHITECTURE AND REALISTIC ORNAMENT

The first phase—the pictorial architectural—is quite conservatively architectural in its content, but its range of realistic pictorialism is much wider than that of the old style. On the recessive planes of the painted wall appear ornaments which are quite at home in a rich man's house—on the cornice, statuary and pieces of rich plate; on the podium socle, plinth statues; on the central wall, wreaths and decorative masks.<sup>7</sup> At first there is little among these except the mask which smacks outright of the theater, but gradually their source becomes abundantly clear and they are shown to be part of a repertoire employed in one of the three types of theatrical set. This type is the tragic, from which the style may be said principally to evolve, though the other two types, the comic and the satyric, were also employed when the time was ripe.

The tragic set recalls the splendor of the Hellenistic royal palace. Vitruvius in his brief characterization mentions only its architectural and sculptural effects,<sup>8</sup> but from Athenaeus' description of actual royal constructions which were influenced by the stage and themselves influenced it in turn, one may add also pictures and a tendency to decorate a room or suite with one predominant note, either of cult

<sup>6</sup> For the use of vaulted ceilings, Vitruvius, vii, iii and A. W. Van Buren, *JRS*, 14, 1924, pp. 112–122.

<sup>7</sup> The decorations of a house of this period are illustrated in the plates and text of A. Maiuri, *La Villa dei Misteri*, Rome, 1931.

<sup>8</sup> Vitruvius v, vi, 8 and vii, v, 2.



theme or heroic story. Three sources of such inspiration, the cults of Dionysus, of Aphrodite, and the stories of the Homeric epic are specifically mentioned by Athenaeus and recur in the second style not once but several times.<sup>9</sup>

It is not surprising, therefore, even in this severe and restrained phase of this style, to find that among the architectural rooms of the Villa Item the principal suite in one secluded corner has lavished upon its two rooms all the realistic ornament of a cult close to the scene painter's craft. This is the famous Nuptial triclinium and cubiculum, in which theatrical masks, Dionysiac statues, and the narrative frieze of life size figures from the Sacred Wedding, half sculptural, half pictorial in their treatment, all reinforce the central theme. Among them, inconspicuous upon the cornice of the cubiculum, occurs the first form of actual picture to appear on Pompeian walls. I refer to the two scenes of open air offering which are represented in this room. Their form is the sacral triptych (fig. 1); their subject sacral landscape.

#### THEATRICAL VISTA AND PICTORIAL WALL

The second phase is both a further exploitation of the theatrical repertoire of the scene painter and also a slow advance in pictorialism. It may be termed the theatrical pictorial and is well illustrated by the Boscoreale villa of Fannius Synistor.<sup>10</sup> This shows the culmination of the direct theatrical borrowings already visible to a lesser extent in the Labyrinth House.<sup>11</sup> In the villa they are used for two purposes, the one destructive of the old architectural idea, the other a constructive fusion of theatrical elements into new pictorial effects.

<sup>9</sup> Athenaeus describes such recurrent decorative themes in the pleasure tent and barge of the Ptolemies and in the yacht of Hiero of Syracuse in his *Deipnosophistae* v, 197 (recesses of the tent holding tragic, comic and satyric groups); 205 (rooms dedicated to Aphrodite and Dionysus); 207 (rooms dedicated to the Iliad and Aphrodite).

<sup>10</sup> F. Barnabei, *La Villa Pompeiana di Fannio Synistore*, Rome, 1901.

<sup>11</sup> These are listed and illustrated in *Art Bulletin* xviii, 1936, p. 412, figs. II-V.



FIG. 1.—WALL FROM NUPTIAL CUBICULUM IN VILLA ITEM.  
AFTER ANDERSON 26551



The purpose of the direct incorporation of the theatrical set, of which as many as seven examples appear in the villa, is to break down the structural wall. This is done by introducing the central vista of the tragic set, sometimes an empty court, more frequently a court with a tholos temple. In the Metropolitan cubiculum from this house the less adaptable comic street sets, again grouped round a central shrine, are used along with the landscape of the satyric to eliminate almost completely the old structural type of wall.

The other purpose, found in the Large Triclinium of the villa (the analogue in this phase of the Villa Igem's Dionysiac room), is to treat the structural surface of the tragic set as no longer a revetted series of blocks, but a flat pictorial ground, and to make of its columns the frame for a near picture. The process can be seen in the central panel of the central wall illustrated in Curtius' *Wandmalerei Pompejis*, fig. 60. Note there the elements of the tragic repertoire which go into its formation. The figure of the panel is a statue of Venus, which was flanked in the adjoining panels by the Three Graces, and by the group of Dionysus and Ariadne previously used as center of the Villa Igem's frieze. The background, however, is something new. It is a modification of the scenic vista fused with the sculptural type into a half landscape, half pictorial effect. To either side of the goddess is a little temple, on the right a tholos with the addition of Psyche and the Erotes. Note further the same fusion attempted on the cornice, where against the background of a court vista rests another theatrical motif, the sacral triptych—here of a woman seated on a low plinth, holding a shield. Thus in this wall we see a blending of old scenic motifs with a considerable net pictorial gain, while at the same time recurs the prominence of a cult theme, now that of Venus.

#### SACRAL PICTORIALISM AND LANDSCAPE

The same conjunction of a growing pictorialism, landscape elements, and an emphatic sacral note is found on the walls of the triclinium in the main suite of the House of Obellius Firmus, illustrated herewith (figs. 2, 3). Here, just as in the last phase architectural melted into theatrical, so now theatricality dissolves into a sacral pictorialism, which henceforth dominates the last phase. The sacral note is found on both the long and short walls of this room, and recurs in the adjoining cubiculum, one of whose two triptychs is illustrated (fig. 4). It repeats the Boscoreale triptych just described.

Here again Venus is in the ascendant, for a purely pictorial rendering of the goddess occupies the flat surface of the long wall (fig. 2), whose masks, columns, and partial court vista still follow reminiscently the old theatrical pattern. In the left upper corner Venus appears once more in a sacral picture of a new square type, in which the goddess stands in front of a table supporting her nuptial torch and other attributes.

The short central wall (fig. 3), however, shows a new advance. Framed in a *proscenium*, its border still retaining the outline of the old theatrical door, is a new type of sacral vista, again a near landscape picture, in which for the first time human beings occur; one can see in it three women performing a rite in the open air at a shrine or a tomb. Again on this wall the central theme is reinforced by sacral paintings on the upper





FIG. 2.—TRICLINIUM IN THE HOUSE OF OBELLIUS FIRMUS. LONG WALL. PRIVATE PHOTOGRAPH

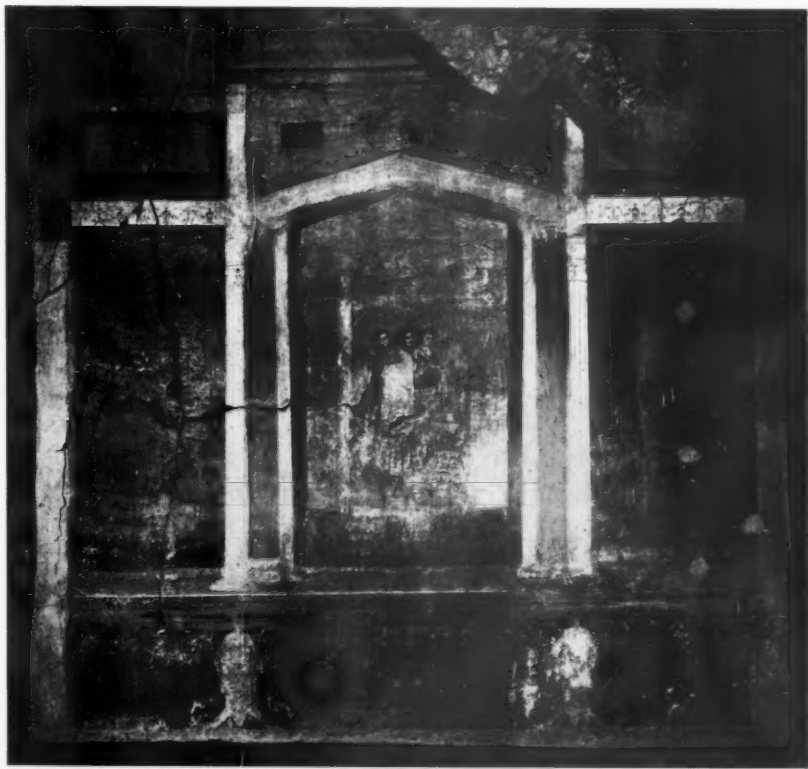


FIG. 3.—TRICLINIUM IN THE HOUSE OF OBELLIUS FIRMUS. SHORT WALL. PRIVATE PHOTOGRAPH



wall; the surviving one of a pair shows one woman holding a triptych open before the gaze of another. At the same time the flat pictorial wall is marked by a complete absence of the old architectural ornament which still survived at Boscoreale. In its place the two columns are picked out with painted ornament, as are also the white panels to left and right of the vista.

The concurrent advance of sacral theme, of landscape setting, and pictorial ornamental surface reaches its height in Pompeii in the rooms of the Homeric cryptoporticus, the corridor of which has as its decorative theme the last of the familiar Hellenistic decorations, the battles of Troy. The rooms have been described in detail by Rostovtzeff in his *Mystic Italy*.<sup>12</sup> Here in a triclinium of similar oblong shape, sacral triptychs, alternating with others displaying divine attributes, are used on the long walls, and on the short a landscape picture with figures too dim now to be interpreted. At the same time the wall shows an increase of pictorial ornament.

The fullest expression of both pictorial wall and sacral theme, however, is to be found not in Pompeii, but in Rome in the Farnesina house.<sup>13</sup> Here not only on the wall illustrated in Curtius' fig. 65, with its central picture of the Suckling of Dionysus, but also in the stuccoes of the several rooms the sacral theme, especially in its mystic aspects, pervades the whole decoration, while a pictorial treatment has spread also to the roof. In this room it is Dionysus, in another the nuptial Venus, whose importance is stressed. Note, however, again the prevailing pictorialism of the ornamental wall, into which purely for their pictorial value are introduced the two archaizing panels of the girl musicians.

#### THE TRIUMPH OF A FREE PICTORIALISM

If one may, therefore, describe this third phase of the style as sacral pictorial, it is interesting to see how in preparation for the largely ornamental pictorial third style, the sacral element itself passes gently into secular and landscape themes. This can be illustrated by two rooms, one in Pompeii, and one in Rome. The Pompeian room is from the House of the Epigrams and is illustrated by Mau's Plate XI in his book on Pompeii. This had three *prostades*, one on each wall, framing in each case a painted illustration of an epigram by a South Italian poet, Leonidas of Tarentum. Mau's illustration shows the Dionysiac scene, which had opposite it a scene of Venus and Pan, while the central wall treated Homer and the Fisherman. Thus the same three repetitive themes, which we noted earlier, two sacral, one heroic, were here united, but given a new, lighter and more familiar tone.

The Roman room is the triclinium in the House of Livia on the Palatine, and illustrates the passage to a free pictorialism both in the central picture of the wall and also in its ornamental detail (fig. 5). The theatrical note is now fast vanishing. It survives in a very free rendering of the theatrical tragic framework on the long wall, which has an equally free rendering, almost a mere reminiscence, of the comic street setting in the panel to the left. Triptychs with sacral scenes — one of the sacrifice of a lamb by three women — appear in their usual place, but in the central vistas still vaguely preserving their traditional outlines is a completely new feature, a genuine picture with a romantic theme in a landscape setting. On the long wall it is Io and

<sup>12</sup> New York, 1927, pp. 55-86.

<sup>13</sup> Rostovtzeff, *Mystic Italy*, pp. 86, 114-124.





FIG. 4.—SACRAL TRIPTYCH FROM THE CUBICULUM OF THE HOUSE OF OBELLIUS FIRMUS. PRIVATE PHOTOGRAPH

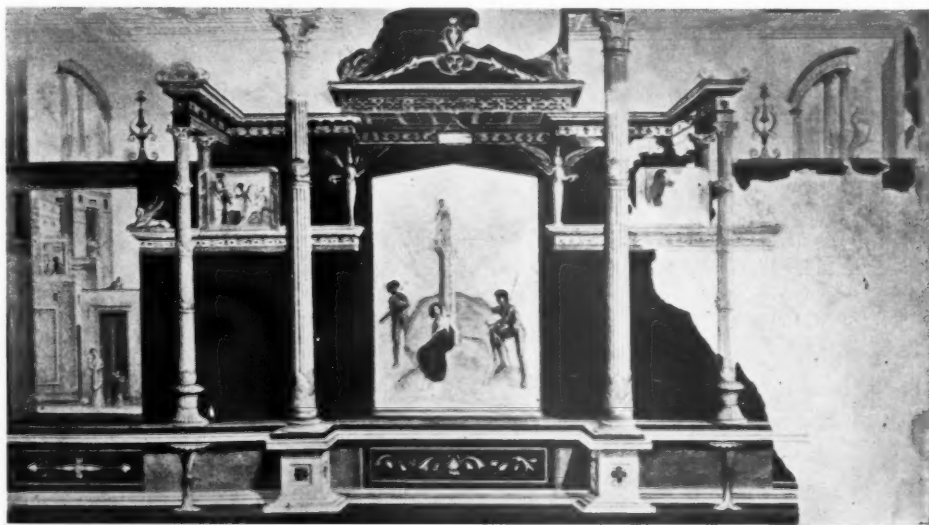


FIG. 5.—WALL OF TRICLINIUM IN THE HOUSE OF LIVIA ON THE PALATINE. AFTER CURTIUS, *Wandmalerei Pompeii*. FIG. 62



Argus, a copy of a famous original; on the short, Polyphemus and his reluctant Galatea. The picture has thus climbed from the floor, first to the cornice, now to a central prominence in a pictorial wall and has won its freedom at last. The sacral open-air vista has become a true picture—a landscape peopled by human beings.

In summary, therefore, it may be said that the second style performs a useful function as a transition between two tastes, the Hellenistic and the Roman. It begins as a pictorial rendering, a theatrical version of Hellenistic architecturalism, and after shedding its theatricality, ends as the prelude to the Roman pictorialism controlled and uncontrolled of the third and fourth styles, in the latter of which even architecture can be used for fantastic pictorial effect. The nature of the second style itself, however, accounts for the slowness of the transformation, because it is primarily a theatrical style used to develop the local architectural tendencies already apparent in the Hellenistic structural style as found in Italy. Until the three main decorative possibilities inherent in the scenic tradition had been exploited each in turn, until its architecturalism, its theatricality and its sacral decorative range had all left their mark on the wall, the way was not clear for a free unfettered expression of a native taste, of the Roman's desire to decorate his home with the warmer colors of his own fancy, to have under his eyes pictures which represented the human subjects of his own individual choice and to set those figures in the free air of a landscape setting.<sup>14</sup>

HOBART COLLEGE

ALAN M. G. LITTLE

<sup>14</sup> For an interesting assertion of the Roman claim to originality in the invention of landscape (without, however, a just appreciation of the influence of theatrical painting), C. M. Dawson, *Yale Classical Studies*, Vol. IX, *Romano-Campanian Mythological Landscape Painting*, New Haven, 1944.



## EVIDENCE OF INFLECTION IN THE "CHARIOT" TABLETS FROM KNOSSOS

IN ATTEMPTING to decipher documents written in an unknown language with an unknown script, the first step is to establish the facts that are obvious from an inspection of the available documents. By combining hard work with a certain amount of common sense, answers to the following fundamental questions can often be found:

- 1—What different signs are used in writing the documents?
- 2—What is the numerical system?
- 3—Are ideograms used, and, if so, do they give any indication of the nature of the documents?
- 4—Can the documents be classified, and, if so, into what categories?
- 5—Can separate words be distinguished?

After long years of work, the publications of Sir Arthur Evans, supplemented, and in some cases corrected, by those of Dr. Johannes Sundwall, have supplied answers to all of these questions for the scripts of pre-Hellenic Crete and Greece. The inscriptions from Crete itself fall, in general, into three groups: the Hieroglyphic, Linear Class A and Linear Class B. For each of these a list of signs has been drawn up, and the numerical system analyzed. The individual tablets can be classified as to the system of script used, provenance and approximate time of writing, and contents (as revealed by the ideograms used). Since words are usually separated in writing, and frequently further distinguished by word-dividers and the use of different sizes of signs, it is normally a simple matter to tell them apart. While the direction of the writing is not always consistent in the Hieroglyphic system, in Linear Class A it is usually, and in Linear Class B always, from left to right; in the last-named, therefore, the spelling of the words is certain.

So much for the fundamental problems involved.

The second step in the decipherment is to find, by careful analysis and logical deduction, what conclusions can be drawn from these fundamental facts.

One conclusion is fairly well established. The symbols used in writing the various systems are not alphabetic. While a certain ideographic element is present, the signs are, in general, syllabic. For any further deductions, however, each system must be examined separately, since the number of symbols in common use varies from system to system, and their use is not identical.

Theoretically, at least, it should also be possible to determine whether the language (or languages) reproduced in the various scripts had inflection. If a language has inflection, certain signs are bound to appear over and over again in certain positions of the written words, as prefixes, suffixes or infixes. No matter how much these changes may be obscured,<sup>1</sup> the fact that they occur regularly must reveal them, if

<sup>1</sup> When a syllabary is used they are bound to be obscured, since even the simplest syllabary consists of signs that combine a consonant and vowel, so that even a slight inflectional alteration may produce a word spelled with entirely different signs. For a further exposition of the difficulties concerned, see below, p. 150.



the amount of material available for analysis is large enough, and the analysis sufficiently intensive.

It is the purpose of this article to show that the language of the Linear Class B tablets was inflected. At present this system furnishes the most satisfactory starting-point for such a demonstration. The amount of material available is not very large, but there is enough to justify a tentative conclusion.<sup>2</sup> We can be sure that these inscriptions are homogeneous, since they are limited as to place (all were found at Knossos), as to time (all belong approximately to the fifteenth century B.C.), and in content (for the most part, inventories of one kind or other are represented). In addition, they are usually carefully written and fairly well preserved, and their subject matter is frequently obvious from the deposits in which they were found and the ideograms they contain, so that they can be labelled "Sword" tablets, "Chariot" tablets, "Grain" tablets, and so on. Although their number is not as great as we might wish, there is every reason to suppose that the inscriptions published are a fair example of the ones still unpublished or undiscovered; some of the longest and most legible examples have been published.

Since a study of the kind here contemplated is almost unprecedented, it is necessary to set down the rules governing what will be considered admissible as evidence.<sup>3</sup> Any facts mentioned which do not conform strictly to these rules must be considered supplementary, and under no circumstances as evidence on which further theorizing can be based.

The rules are simple. It is obvious that, in any language written in an alphabet or syllabary, a certain number of words can be found that have many signs in common and still are not related—e.g., in English, the pairs "heavy" and "heaven"; "berry" and "merry" each have four signs in common. Yet they are not related, although a careless alien might conclude that they showed suffixal and prefixal inflection respectively. The words chosen must come from statements dealing with the same subject matter; then the presumption that similar types of words are used is valid; if identical words or phrases appear in the different statements, the assumption is strengthened. If, in statements connected with one another by an identity of subject matter and a certain amount of identity in the words used, similar words appear, differing only slightly in spelling, the deduction that such changes are due

<sup>2</sup> Some 200 inscriptions have been published, most of them quite short, a few so fragmentary that only a single sign is legible; they furnish about 700 different words, some of which appear in as many as seven different places in published inscriptions. Evans and Sundwall sometimes cite words out of context from unpublished inscriptions; adding these gives a total of about 750 words available for study.

<sup>3</sup> In this connection, attention should be called to a very interesting book, written by a mathematician: Cassius J. Keyser, *Thinking about Thinking*, 1926 (E. P. Dutton & Co.). The author points out that a kind of reasoning he calls "postulational thinking," first used by Euclid, can be used to great advantage in fields not related to mathematics. In this kind of reasoning it is only necessary to set up a series of axioms and postulates whose truth is probable, although not always demonstrable, and on these as a basis, set up a series of propositions which can be proved logically, and then used as a foundation for further hypotheses.

In the particular kind of work involved in dealing with the Minoan scripts, where so little is known, and facts lend themselves to so many interpretations, this kind of reasoning should be very useful, since it makes it necessary to state the postulates on which deductions are based clearly, and in advance. In this way errors in logic can be avoided, and the great danger of reasoning in a circle obviated.



to inflection is certainly permissible. Once the fundamental likelihood that a change of a certain type represents inflection is established, the findings may be supplemented by similar examples from extraneous material.

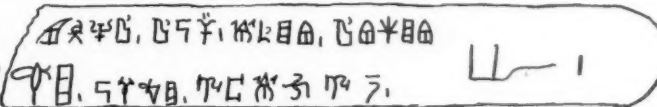
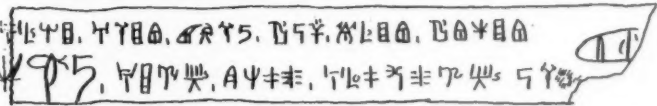
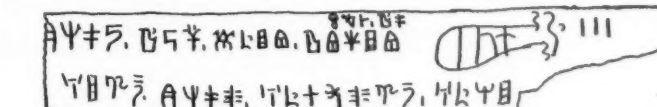
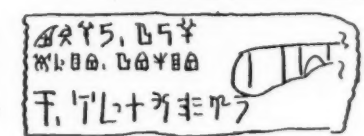
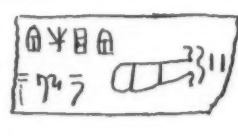
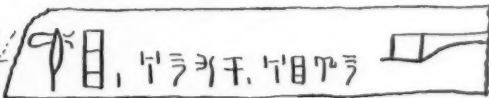
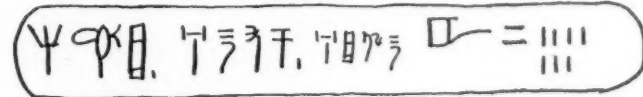
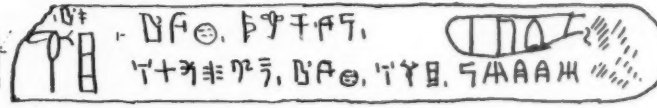
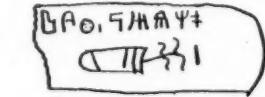
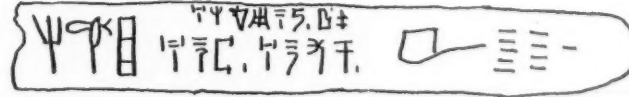
- ①  PM. fig. 766c
- ②  PM. fig. 764f
- ③  PM. fig. 764c
- ④  PM. fig. 764b
- ⑤  PM. fig. 764a
- ⑥  PM. fig. 766b
- ⑦  PM. fig. 766d
- ⑧  PM. fig. 766a
- ⑨  PM. fig. 764d
- ⑩  PM. fig. 766c

FIG. 1.—THE "CHARIOT" TABLETS

For the purposes of this article certain "Chariot" tablets will be used (fig. 1).<sup>4</sup> They have been chosen from a group of inscriptions dealing with chariots and parts

<sup>4</sup> For convenience in reference the tablets have been numbered, and will be mentioned by number hereafter. Since the inscriptions are not all the work of the same scribe, and there are slight variations in handwriting, the signs in the reproduction here have been normalized to some extent. The reader is referred to the transcriptions in *PM.* for the actual appearance of the signs.



of chariots, as the pictographs at the end of each indicate. All except #7 are damaged at the left (the beginning); some, like #4, 5, 9, have lost a great deal; in #10 the inscription itself appears to be complete, although the edge of the tablet has been broken. #6 and 7 probably contained identical statements. The restoration of the initial signs of #2 is copied from Evans; the evidence justifying the prefixing of signs to #1, 6, 8 will be presented in due course.

Even a cursory inspection of the inscriptions shows that they are very similar, and that a good many words appear in identical form in two or more different tablets. A complete list of these is given in fig. 2.

|                 |                 |
|-----------------|-----------------|
| 𐀀𐀃𐀆, 𐀆𐀃𐀆𐀆, 𐀆𐀆𐀆𐀆 | #1, 2, 3, 4, 5  |
| 𐀆𐀆𐀆             | #1, 6, 7, 8, 10 |
| 𐀆𐀆𐀆             | #1, 3           |
| 𐀆𐀆𐀆             | #2, 4           |
| 𐀆𐀆𐀆             | #2, 3           |
| 𐀆𐀆              | #3, 8, 10       |
| 𐀆𐀆+𐀆𐀆𐀆𐀆𐀆        | #3, 4           |
| 𐀆𐀆𐀆𐀆            | #3, 6, 7        |
| 𐀆𐀆𐀆             | #8 (twice), 9   |
| 𐀆𐀆𐀆𐀆            | #6, 7           |

#### SIGNS OF LINEAR B

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 𐀀 | 𐀁 | 𐀂 | 𐀃 | 𐀄 | 𐀅 | 𐀆 | 𐀇 | 𐀈 | 𐀉 | 𐀊 | 𐀋 | 𐀌 | 𐀍 | 𐀎 | 𐀏 | 𐀐 | 𐀑 | 𐀒 | 𐀓 | 𐀔 | 𐀕 | 𐀖 | 𐀗 | 𐀘 | 𐀙 | 𐀚 | 𐀛 | 𐀜 | 𐀝 | 𐀞 | 𐀟 | 𐀠 | 𐀡 | 𐀢 | 𐀣 | 𐀤 | 𐀥 | 𐀦 | 𐀧 | 𐀨 | 𐀩 | 𐀪 | 𐀫 | 𐀬 | 𐀭 | 𐀮 | 𐀯 | 𐀰 | 𐀱 | 𐀲 | 𐀳 | 𐀴 | 𐀵 | 𐀶 | 𐀷 | 𐀸 | 𐀹 | 𐀺 | 𐀻 | 𐀼 | 𐀽 | 𐀾 | 𐀿 | 𐁀 | 𐁁 | 𐁂 | 𐁃 | 𐁄 | 𐁅 | 𐁆 | 𐁇 | 𐁈 | 𐁉 | 𐁊 | 𐁋 | 𐁌 | 𐁍 | 𐁎 | 𐁏 | 𐁐 | 𐁑 | 𐁒 | 𐁓 | 𐁔 | 𐁕 | 𐁖 | 𐁗 | 𐁘 | 𐁙 | 𐁚 | 𐁛 | 𐁜 | 𐁝 | 𐁞 | 𐁟 | 𐁠 | 𐁡 | 𐁢 | 𐁣 | 𐁤 | 𐁥 | 𐁦 | 𐁧 | 𐁨 | 𐁩 | 𐁪 | 𐁫 | 𐁬 | 𐁭 | 𐁮 | 𐁯 | 𐁰 | 𐁱 | 𐁲 | 𐁳 | 𐁴 | 𐁵 | 𐁶 | 𐁷 | 𐁸 | 𐁹 | 𐁺 | 𐁻 | 𐁼 | 𐁽 | 𐁾 | 𐁿 | 𐂀 | 𐂁 | 𐂂 | 𐂃 | 𐂄 | 𐂅 | 𐂆 | 𐂇 | 𐂈 | 𐂉 | 𐂊 | 𐂋   | 𐂌 | 𐂍 | 𐂎 | 𐂏 | 𐂐 | 𐂑 | 𐂒 | 𐂓 | 𐂔 | 𐂕 | 𐂖 | 𐂗 | 𐂘 | 𐂙 | 𐂚 | 𐂛 | 𐂜 | 𐂝 | 𐂞 | 𐂟 | 𐂠 | 𐂡 | 𐂢 | 𐂣 | 𐂤 | 𐂥 | 𐂦 | 𐂧 | 𐂨 | 𐂩 | 𐂪 | 𐂫 | 𐂬 | 𐂭 | 𐂮 | 𐂯 | 𐂰 | 𐂱 | 𐂲 | 𐂳 | 𐂴 | 𐂵 | 𐂶 | 𐂷 | 𐂸 | 𐂹 | 𐂺 | 𐂻 | 𐂼 | 𐂽 | 𐂾 | 𐂿 | 𐃀 | 𐃁 | 𐃂 | 𐃃 | 𐃄 | 𐃅 | 𐃆 | 𐃇 | 𐃈 | 𐃉 | 𐃊 | 𐃋 | 𐃌 | 𐃍 | 𐃎 | 𐃏 | 𐃐 | 𐃑 | 𐃒 | 𐃓 | 𐃔 | 𐃕 | 𐃖 | 𐃗 | 𐃘 | 𐃙 | 𐃚 | 𐃛 | 𐃜 | 𐃝 | 𐃞 | 𐃟 | 𐃠 | 𐃡 | 𐃢 | 𐃣 | 𐃤 | 𐃥 | 𐃦 | 𐃧 | 𐃨 | 𐃩 | 𐃪 | 𐃫 | 𐃬 | 𐃭 | 𐃮 | 𐃯 | 𐃰 | 𐃱 | 𐃲 | 𐃳 | 𐃴 | 𐃵 | 𐃶 | 𐃷 | 𐃸 | 𐃹 | 𐃺 | 𐃻 | 𐃼 | 𐃽 | 𐃾 | 𐃿 | 𐄀 | 𐄁 | 𐄂 | 𐄃 | 𐄄 | 𐄅 | 𐄆 | 𐄇 | 𐄈 | 𐄉 | 𐄊 | 𐄋 | 𐄌 | 𐄍 | 𐄎 | 𐄏 | 𐄐 | 𐄑 | 𐄒 | 𐄓 | 𐄔 | 𐄕 | 𐄖 | 𐄗 | 𐄘 | 𐄙 | 𐄚 | 𐄛 | 𐄜 | 𐄝 | 𐄞 | 𐄟 | 𐄠 | 𐄡 | 𐄢 | 𐄣 | 𐄤 | 𐄥 | 𐄦 | 𐄧 | 𐄨 | 𐄩 | 𐄪 | 𐄫 | 𐄬 | 𐄭 | 𐄮 | 𐄯 | 𐄰 | 𐄱 | 𐄲 | 𐄳 | 𐄴 | 𐄵 | 𐄶 | 𐄷 | 𐄸 | 𐄹 | 𐄺 | 𐄻 | 𐄼 | 𐄽 | 𐄾 | 𐄿 | 𐅀 | 𐅁 | 𐅂 | 𐅃 | 𐅄 | 𐅅 | 𐅆 | 𐅇 | 𐅈 | 𐅉 | 𐅊 | 𐅋 | 𐅌 | 𐅍 | 𐅎 | 𐅏 | 𐅐 | 𐅑 | 𐅒 | 𐅓 | 𐅔 | 𐅕 | 𐅖 | 𐅗 | 𐅘 | 𐅙 | 𐅚 | 𐅛 | 𐅜 | 𐅝 | 𐅞 | 𐅟 | 𐅠 | 𐅡 | 𐅢 | 𐅣 | 𐅤 | 𐅥 | 𐅦 | 𐅧 | 𐅨 | 𐅩 | 𐅪 | 𐅫 | 𐅬 | 𐅭 | 𐅮 | 𐅯 | 𐅰 | 𐅱 | 𐅲 | 𐅳 | 𐅴 | 𐅵 | 𐅶 | 𐅷 | 𐅸 | 𐅹 | 𐅺 | 𐅻 | 𐅼 | 𐅽 | 𐅾 | 𐅿 | 𐆀 | 𐆁 | 𐆂 | 𐆃 | 𐆄 | 𐆅 | 𐆆 | 𐆇 | 𐆈 | 𐆉 | 𐆊 | 𐆋 | 𐆌 | 𐆍 | 𐆎 | 𐆏 | 𐆐 | 𐆑 | 𐆒 | 𐆓 | 𐆔 | 𐆕 | 𐆖 | 𐆗 | 𐆘 | 𐆙 | 𐆚 | 𐆛 | 𐆜 | 𐆝 | 𐆞 | 𐆟 | 𐆠 | 𐆡 | 𐆢 | 𐆣 | 𐆤 | 𐆥 | 𐆦 | 𐆧 | 𐆨 | 𐆩 | 𐆪 | 𐆫 | 𐆬 | 𐆭 | 𐆮 | 𐆯 | 𐆰 | 𐆱 | 𐆲 | 𐆳 | 𐆴 | 𐆵 | 𐆶 | 𐆷 | 𐆸 | 𐆹 | 𐆺 | 𐆻 | 𐆼 | 𐆽 | 𐆾 | 𐆿 | 𐇀 | 𐇁 | 𐇂 | 𐇃 | 𐇄 | 𐇅 | 𐇆 | 𐇇 | 𐇈 | 𐇉 | 𐇊 | 𐇋 | 𐇌 | 𐇍 | 𐇎 | 𐇏 | 𐇐 | 𐇑 | 𐇒 | 𐇓 | 𐇔 | 𐇕 | 𐇖 | 𐇗 | 𐇘 | 𐇙 | 𐇚 | 𐇛 | 𐇜 | 𐇝 | 𐇞 | 𐇟 | 𐇠 | 𐇡 | 𐇢 | 𐇣 | 𐇤 | 𐇥 | 𐇦 | 𐇧 | 𐇨 | 𐇩 | 𐇪 | 𐇫 | 𐇬 | 𐇭 | 𐇮 | 𐇯 | 𐇰 | 𐇱 | 𐇲 | 𐇳 | 𐇴 | 𐇵 | 𐇶 | 𐇷 | 𐇸 | 𐇹 | 𐇺 | 𐇻 | 𐇼 | 𐇽 | 𐇾 | 𐇿 | 𐈀 | 𐈁 | 𐈂 | 𐈃 | 𐈄 | 𐈅 | 𐈆 | 𐈇 | 𐈈 | 𐈉 | 𐈊 | 𐈋 | 𐈌 | 𐈍 | 𐈎 | 𐈏 | 𐈐 | 𐈑 | 𐈒 | 𐈓 | 𐈔 | 𐈕 | 𐈖 | 𐈗 | 𐈘 | 𐈙 | 𐈚 | 𐈛 | 𐈜 | 𐈝 | 𐈞 | 𐈟 | 𐈠 | 𐈡 | 𐈢 | 𐈣 | 𐈤 | 𐈥 | 𐈦 | 𐈧 | 𐈨 | 𐈩 | 𐈪 | 𐈫 | 𐈬 | 𐈭 | 𐈮 | 𐈯 | 𐈰 | 𐈱 | 𐈲 | 𐈳 | 𐈴 | 𐈵 | 𐈶 | 𐈷 | 𐈸 | 𐈹 | 𐈺 | 𐈻 | 𐈼 | 𐈽 | 𐈾 | 𐈿 | 𐉀 | 𐉁 | 𐉂 | 𐉃 | 𐉄 | 𐉅 | 𐉆 | 𐉇 | 𐉈 | 𐉉 | 𐉊 | 𐉋 | 𐉌 | 𐉍 | 𐉎 | 𐉏 | 𐉐 | 𐉑 | 𐉒 | 𐉓 | 𐉔 | 𐉕 | 𐉖 | 𐉗 | 𐉘 | 𐉙 | 𐉚 | 𐉛 | 𐉜 | 𐉝 | 𐉞 | 𐉟 | 𐉠 | 𐉡 | 𐉢 | 𐉣 | 𐉤 | 𐉥 | 𐉦 | 𐉧 | 𐉨 | 𐉩 | 𐉪 | 𐉫 | 𐉬 | 𐉭 | 𐉮 | 𐉯 | 𐉰 | 𐉱 | 𐉲 | 𐉳 | 𐉴 | 𐉵 | 𐉶 | 𐉷 | 𐉸 | 𐉹 | 𐉺 | 𐉻 | 𐉼 | 𐉽 | 𐉾 | 𐉿 | 𐊀 | 𐊁 | 𐊂 | 𐊃 | 𐊄 | 𐊅 | 𐊆 | 𐊇 | 𐊈 | 𐊉 | 𐊊 | 𐊋 | 𐊌 | 𐊍 | 𐊎 | 𐊏 | 𐊐 | 𐊑 | 𐊒 | 𐊓 | 𐊔 | 𐊕 | 𐊖 | 𐊗 | 𐊘 | 𐊙 | 𐊚 | 𐊛 | 𐊜 | 𐊝 | 𐊞 | 𐊟 | 𐊠 | 𐊡 | 𐊢 | 𐊣 | 𐊤 | 𐊥 | 𐊦 | 𐊧 | 𐊨 | 𐊩 | 𐊪 | 𐊫 | 𐊬 | 𐊭 | 𐊮 | 𐊯 | 𐊰 | 𐊱 | 𐊲 | 𐊳 | 𐊴 | 𐊵 | 𐊶 | 𐊷 | 𐊸 | 𐊹 | 𐊺 | 𐊻 | 𐊼 | 𐊽 | 𐊾 | 𐊿 | 𐋀 | 𐋁 | 𐋂 | 𐋃 | 𐋄 | 𐋅 | 𐋆 | 𐋇 | 𐋈 | 𐋉 | 𐋊 | 𐋋 | 𐋌 | 𐋍 | 𐋎 | 𐋏 | 𐋐 | 𐋑 | 𐋒 | 𐋓 | 𐋔 | 𐋕 | 𐋖 | 𐋗 | 𐋘 | 𐋙 | 𐋚 | 𐋛 | 𐋜 | 𐋝 | 𐋞 | 𐋟 | 𐋠 | 𐋡 | 𐋢 | 𐋣 | 𐋤 | 𐋥 | 𐋦 | 𐋧 | 𐋨 | 𐋩 | 𐋪 | 𐋫 | 𐋬 | 𐋭 | 𐋮 | 𐋯 | 𐋰 | 𐋱 | 𐋲 | 𐋳 | 𐋴 | 𐋵 | 𐋶 | 𐋷 | 𐋸 | 𐋹 | 𐋺 | 𐋻 | 𐋼 | 𐋽 | 𐋾 | 𐋿 | 𐌀 | 𐌁 | 𐌂 | 𐌃 | 𐌄 | 𐌅 | 𐌆 | 𐌇 | 𐌈 | 𐌉 | 𐌊 | 𐌋 | 𐌌 | 𐌍 | 𐌎 | 𐌏 | 𐌐 | 𐌑 | 𐌒 | 𐌓 | 𐌔 | 𐌕 | 𐌖 | 𐌗 | 𐌘 | 𐌙 | 𐌚 | 𐌛 | 𐌜 | 𐌝 | 𐌞 | 𐌟 | 𐌠 | 𐌡 | 𐌢 | 𐌣 | 𐌤 | 𐌥 | 𐌦 | 𐌧 | 𐌨 | 𐌩 | 𐌪 | 𐌫 | 𐌬 | 𐌭 | 𐌮 | 𐌯 | 𐌰 | 𐌱 | 𐌲 | 𐌳 | 𐌴 | 𐌵 | 𐌶 | 𐌷 | 𐌸 | 𐌹 | 𐌺 | 𐌻 | 𐌼 | 𐌽 | 𐌾 | 𐌿 | 𐍀 | 𐍁 | 𐍂 | 𐍃 | 𐍄 | 𐍅 | 𐍆 | 𐍇 | 𐍈 | 𐍉 | 𐍊 | 𐍋 | 𐍌 | 𐍍 | 𐍎 | 𐍏 | 𐍐 | 𐍑 | 𐍒 | 𐍓 | 𐍔 | 𐍕 | 𐍖 | 𐍗 | 𐍘 | 𐍙 | 𐍚 | 𐍛 | 𐍜 | 𐍝 | 𐍞 | 𐍟 | 𐍠 | 𐍡 | 𐍢 | 𐍣 | 𐍤 | 𐍥 | 𐍦 | 𐍧 | 𐍨 | 𐍩 | 𐍪 | 𐍫 | 𐍬 | 𐍭 | 𐍮 | 𐍯 | 𐍰 | 𐍱 | 𐍲 | 𐍳 | 𐍴 | 𐍵 | 𐍶 | 𐍷 | 𐍸 | 𐍹 | 𐍺 | 𐍻 | 𐍼 | 𐍽 | 𐍾 | 𐍿 | 𐎀 | 𐎁 | 𐎂 | 𐎃 | 𐎄 | 𐎅 | 𐎆 | 𐎇 | 𐎈 | 𐎉 | 𐎊 | 𐎋 | 𐎌 | 𐎍 | 𐎎 | 𐎏 | 𐎐 | 𐎑 | 𐎒 | 𐎓 | 𐎔 | 𐎕 | 𐎖 | 𐎗 | 𐎘 | 𐎙 | 𐎚 | 𐎛 | 𐎜 | 𐎝 | 𐎞 | 𐎟 | 𐎠 | 𐎡 | 𐎢 | 𐎣 | 𐎤 | 𐎥 | 𐎦 | 𐎧 | 𐎨 | 𐎩 | 𐎪 | 𐎫 | 𐎬 | 𐎭 | 𐎮 | 𐎯 | 𐎰 | 𐎱 | 𐎲 | 𐎳 | 𐎴 | 𐎵 | 𐎶 | 𐎷 | 𐎸 | 𐎹 | 𐎺 | 𐎻 | 𐎼 | 𐎽 | 𐎾 | 𐎿 | 𐏀 | 𐏁 | 𐏂 | 𐏃 | 𐏄 | 𐏅 | 𐏆 | 𐏇 | 𐏈 | 𐏉 | 𐏊 | 𐏋 | 𐏌 | 𐏍 | 𐏎 | 𐏏 | 𐏐 | 𐏑 | 𐏒 | 𐏓 | 𐏔 | 𐏕 | 𐏖 | 𐏗 | 𐏘 | 𐏙 | 𐏚 | 𐏛 | 𐏜 | 𐏝 | 𐏞 | 𐏟 | 𐏠 | 𐏡 | 𐏢 | 𐏣 | 𐏤 | 𐏥 | 𐏦 | 𐏧 | 𐏨 | 𐏩 | 𐏪 | 𐏫 | 𐏬 | 𐏭 | 𐏮 | 𐏯 | 𐏰 | 𐏱 | 𐏲 | 𐏳 | 𐏴 | 𐏵 | 𐏶 | 𐏷 | 𐏸 | 𐏹 | 𐏺 | 𐏻 | 𐏼 | 𐏽 | 𐏾 | 𐏿 | 𐐀 | 𐐁 | 𐐂 | 𐐃 | 𐐄 | 𐐅 | 𐐆 | 𐐇 | 𐐈 | 𐐉 | 𐐊 | 𐐋 | 𐐌 | 𐐍 | 𐐎 | 𐐏 | 𐐐 | 𐐑 | 𐐒 | 𐐓 | 𐐔 | 𐐕 | 𐐖 | 𐐗 | 𐐘 | 𐐙 | 𐐚 | 𐐛 | 𐐜 | 𐐝 | 𐐞 | 𐐟 | 𐐠 | 𐐡 | 𐐢 | 𐐣 | 𐐤 | 𐐥 | 𐐦 | 𐐧 | 𐐨 | 𐐩 | 𐐪 | 𐐫 | 𐐬 | 𐐭 | 𐐮 | 𐐯 | 𐐰 | 𐐱 | 𐐲 | 𐐳 | 𐐴 | 𐐵 | 𐐶 | 𐐷 | 𐐸 | 𐐹 | 𐐺 | 𐐻 | 𐐼 | 𐐽 | 𐐾 | 𐐿 | 𐑀 | 𐑁 | 𐑂 | 𐑃 | 𐑄 | 𐑅 | 𐑆 | 𐑇 | 𐑈 | 𐑉 | 𐑊 | 𐑋 | 𐑌 | 𐑍 | 𐑎 | 𐑏 | 𐑐 | 𐑑 | 𐑒 | 𐑓 | 𐑔 | 𐑕 | 𐑖 | 𐑗 | 𐑘 | 𐑙 | 𐑚 | 𐑛 | 𐑜 | 𐑝 | 𐑞 | 𐑟 | 𐑠 | 𐑡 | 𐑢 | 𐑣 | 𐑤 | 𐑥 | 𐑦 | 𐑧 | 𐑨 | 𐑩 | 𐑪 | 𐑫 | 𐑬 | 𐑭 | 𐑮 | 𐑯 | 𐑰 | 𐑱 | 𐑲 | 𐑳 | 𐑴 | 𐑵 | 𐑶 | 𐑷 | 𐑸 | 𐑹 | 𐑺 | 𐑻 | 𐑼 | 𐑽 | 𐑾 | 𐑿 | 𐒀 | 𐒁 | 𐒂 | 𐒃 | 𐒄 | 𐒅 | 𐒆 | 𐒇 | 𐒈 | 𐒉 | 𐒊 | 𐒋 | 𐒌 | 𐒍 | 𐒎 | 𐒏 | 𐒐 | 𐒑 | 𐒒 | 𐒓 | 𐒔 | 𐒕 | 𐒖 | 𐒗 | 𐒘 | 𐒙 | 𐒚 | 𐒛 | 𐒜 | 𐒝 | 𐒞 | 𐒟 | 𐒠 | 𐒡 | 𐒢 | 𐒣 | 𐒤 | 𐒥 | 𐒦 | 𐒧 | 𐒨 | 𐒩 | 𐒪 | 𐒫 | 𐒬 | 𐒭 | 𐒮 | 𐒯 | 𐒰 | 𐒱 | 𐒲 | 𐒳 | 𐒴 | 𐒵 | 𐒶 | 𐒷 | 𐒸 | 𐒹 | 𐒺 | 𐒻 | 𐒼 | 𐒽 | 𐒾 | 𐒿 | 𐓀 | 𐓁 | 𐓂 | 𐓃 | 𐓄 | 𐓅 | 𐓆 | 𐓇 | 𐓈 | 𐓉 | 𐓊 | 𐓋 | 𐓌 | 𐓍 | 𐓎 | 𐓏 | 𐓐 | 𐓑 | 𐓒 | 𐓓 | 𐓔 | 𐓕 | 𐓖 | 𐓗 | 𐓘 | 𐓙 | 𐓚 | 𐓛 | 𐓜 | 𐓝 | 𐓞 | 𐓟 | 𐓠 | 𐓡 | 𐓢 | 𐓣 | 𐓤 | 𐓥 | 𐓦 | 𐓧 | 𐓨 | 𐓩 | 𐓪 | 𐓫 | 𐓬 | 𐓭 | 𐓮 | 𐓯 | 𐓰 | 𐓱 | 𐓲 | 𐓳 | 𐓴 | 𐓵 | 𐓶 | 𐓷 | 𐓸 | 𐓹 | 𐓺 | 𐓻 | 𐓼 | 𐓽 | 𐓾 | 𐓿 | 𐔀 | 𐔁 | 𐔂 |  |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓</ |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |



In every case the three-word phrase appears just before the "chariot" or "chariot part" ideogram. In two instances, it is preceded by the same word (#2, 4:  $\Delta\Delta\Upsilon\zeta$ ); once by a word with the same two initial signs (#1:  $\Delta\Delta\Phi\zeta$ ); and once by an entirely different word which has, however, the final sign (B 40)<sup>5</sup> of the word which occurs twice in this position (#3:  $\Delta\Phi\Upsilon\zeta$ ). This may, if corroborated, show that the first two words, which have the initial signs in common, are inflectional variants of the same word. In that case the inflection is suffixal.

In the second lines of #2 and #3 appear two similar phrases:

$\Upsilon\Theta\Gamma\Upsilon\Delta\Delta\Phi\Upsilon\zeta\Upsilon\kappa\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$

$\Upsilon\Theta\Gamma\Upsilon\Delta\Delta\Phi\Upsilon\zeta\Upsilon\kappa\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$

Only the second word is identical in both groups, but the others are strikingly alike. The first word in each case starts with the same three signs<sup>6</sup> but the final signs are B 11 and B 41a respectively. The second form reappears in two other tablets (#6, 7) where, however, the context is different. Here again the variation is suffixal.

The second word of the phrases has the first three signs in common with  $\Delta\Phi\Upsilon\zeta$  (#3), which, in turn, as we have already noted, shares the final sign with  $\Delta\Delta\Upsilon\zeta$ .

The third words are obviously related, although the spelling is different. In the first phrase,  $\Upsilon\kappa\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$  has B 44b<sup>7</sup> as its third sign and B 11 at the end; in the second phrase,  $\Upsilon\kappa\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$  has B 25 as its third sign, and B 40 at the end. This form is repeated in #4. Another form of what must be the same word ( $\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$ ) can be found in #8, this time omitting the second sign of the other forms (B 54)<sup>8</sup> and with B 41a as its final sign.

It should also be noted that the last word in #1 and what is left of the last word in #5 end in the signs B 31, 40, just as  $\Upsilon\kappa\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$  does. Since all these words occupy approximately the same position in relation to the "chariot" and in relation to the remainder of the statement in which they occur, this ending appears to have a grammatical function of some kind.

Another pair of words that must go together is:  $\Psi\Upsilon\Theta$ ,  $\Psi\Upsilon\zeta$ . These are the most conspicuous words in the inscriptions, always written in larger characters than the

<sup>5</sup> References to signs of the Linear B syllabary are, in general, made by citing the number assigned to them by Evans (*PM*, fig. 666). For necessary divergences from this cf. *AJA*, 1944, p. 63, n. 2.

<sup>6</sup> It will be noted that the first signs are not identical. In one case the superstructure of the sign has two cross-bars, in the other, one. The two variants are usually grouped together as the same sign (B 21), which is by far the most frequent initial sign in Linear B. Both variations occur with almost equal frequency, and in similar juxtapositions. Sometimes, as here, both occur in the same inscriptions (cf. the form of the initial sign of the third word of the first phrase); sometimes they occur in the same word (cf. below, note 11). It has so far proved impossible to determine whether the variation has any significance. A scribe may have omitted one of the bars in rapid writing, or it could have been obliterated in the course of time. An added difficulty lies in the fact that neither Evans nor Sundwall attaches importance to the variation, and since most of our information about the inscriptions comes, not from the originals, nor even from photographs, but from their transcriptions, we must allow for the possibility that they inadvertently added or subtracted a bar in transcribing. The two variations do, however, exist, and until we are sure of their significance, their occurrence must be noted.

<sup>7</sup> It is only fair to point out that, though Evans certainly writes B 44b in his transcription, he indicates that the tablet has been slightly injured at this point. Since the original is not available, there is always the possibility that the reading should be B 25. The signs are similar.

<sup>8</sup> Provided, as always, that it has not been inadvertently omitted in the transcription. For examples of errors of this kind cf. *AJA*, 1944, p. 68, note 8.



other words, and always initial in the line, if not in the statement. The first form is preserved in its entirety twice (#7, 10) and three times (#1, 6, 8) its second letter appears so close to the broken left edge of the tablets that the missing initial sign can be restored. The second form occurs only in #2, where traces of the first sign are still visible. It is very likely that the word also occurred, in one form or the other, on the missing portions of the other four tablets.

Three other pairs of possible inflectional variants can be cited from the inscriptions:

𐎶𐎶𐎢 (#8, penultimate): 𐎶𐎶𐎢𐎢 (#2, line 1.2)

𐎶𐎶𐎶𐎶𐎶 (#8, final): 𐎶𐎶𐎢𐎶𐎶 (#9, final)

𐎶𐎶𐎢𐎢 (#1, line 2.2): 𐎶𐎶𐎶𐎶 (#2, final)

In #10 two words, 𐎶𐎶𐎢, 𐎶𐎶𐎶𐎶, both beginning with B 21, 41a, are juxtaposed. It is hardly likely here that we have the same word with two suffixal variations, but it is possible that we have two words with similar prefixes.

To recapitulate: the ten tablets listed in fig. 1 contain 29 words of different spelling; of these 12 are repeated in two or more of the inscriptions. 17 of the words give some evidence of inflection; they can be divided into 7 groups of two each, and one group of three. Section One of the table given in figure 3 shows these groups.

This array of evidence from the "Chariot" tablets alone indicates that the language used in the tablets must have been inflected.

Section Two of figure 3 lists supplementary data. (Asterisks before words indicate that these do not appear in any published inscription but have been quoted out of context by Evans or Sundwall).

These words have been chosen according to the following rules:

- 1—Other variants for words which appear in Section One; i.e., words for which the possibility of inflection has already been established.
- 2—Variants of words found in the "Chariot" inventories, but for which no inflectional variants appear there. The choice of parallels was limited to the following: (a) variants following a pattern already established by groups from the "Chariot" tablets; (b) words having at least three consecutive signs in common with the one in question.
- 3—Words not in the "Chariot" inscriptions which show variations already established within these inscriptions.

These limitations may seem stringent, but they are necessary at this stage if the demonstration is to have any value for future work.

Under rule 1 the following words were added:

for group A: 𐎶𐎶𐎶𐎶 (P.M. fig. 683, line 7);<sup>9</sup>

for group B: 𐎶𐎶𐎢 (P.M. fig. 775, line 11);

for group C: 𐎶𐎶𐎶𐎶 (AltKr. fig. 15. I. 1a—no context);

and D: 𐎶𐎶𐎶𐎶𐎶; 𐎶𐎶𐎶𐎶𐎶 (AltKr. fig. 15. I. 2—no context);<sup>10</sup>

for group E: 𐎶𐎶𐎶 (AltKr. fig. 22, line 3).

<sup>9</sup> This is an unusual inscription, without ideograms or numbers. There is, therefore, no clue to its subject matter. It contains, in addition to the word just cited, another possible inflectional variation in the word added to group E under rule 2a below.

<sup>10</sup> The use of B 21b here, when the parallels from the "Chariot" inscriptions have 21a, has no significance, since the words are quoted by Sundwall, who makes no distinction between the two forms.



Under rule 2 (a):

for group D: 𐀔𐀕𐀖𐀗 (*AltKr.* fig. 3.3 and 4. I. 1a—no context);

for group E: 𐀕𐀖𐀗 (*PM.* fig. 683, line 2);<sup>9</sup>

I Inflection groups from the  
"Chariot" tablets

II Additions from supplementary material in Linear B

|   |  |  |
|---|--|--|
| A | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗   | 𐀔𐀕𐀖𐀗   |
| B | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗   | 𐀔𐀕𐀖𐀗   |
| C | 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗 of { 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗 | 𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗   |
| D | 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗                                   | 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗 |
| E | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗 𐀔𐀕𐀖𐀗  | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗   |
| F | 𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗                                     |  |
| G | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗   |  |
| H | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗   | 𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗<br>𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗   |

FIG. 3.—GROUPS FROM LINEAR B THAT MAY SHOW INFLECTION

Under rule 2 (b):

for group H: 𐀔𐀕𐀖𐀗 (*AltKr.* fig. 13. II. 2a—no context);

and: 𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗; 𐀔𐀕𐀖𐀗𐀔𐀕𐀖𐀗 (*PM.* fig. 838 c and e resp.).<sup>11</sup>

<sup>11</sup> These words illustrate very well the difficulty (referred to in note 6) of deciding whether the two different ways of writing B 21 have any significance. The two forms of the word listed come from two very similar "Sword" tablets, and occupy identical places in the inscriptions, yet, while both have B 21b as the final sign, one uses B 21a for the initial sign, the other does not.



## Under rule 3:

for group C (the alternation of final B 11 and B 40): 𐤁𐤌𐤍 (P.M. fig. 678 b, second register; <sup>12</sup> 658, line 3; 655 #4); and 𐤁𐤌𐤍 (AltKr. fig. 20, second inscription). for group D (the alternation of final B 7 and B 40) eight additional parallels can be cited. This particular alternation has been discussed by Evans (P.M. 714, cf. fig. 696) and by Sundwall (AltKr. 8-9; 20-22 and fig. 3, where all ten pairs given for the group are listed).

This completes the survey of the data within the limits set. Enough evidence has been presented to show that inflection of some kind was present in the language of Linear Class B.

Theoretically, the next step should be to analyze all the published inscriptions in the same way, and from the facts acquired in this way, set up some of the basic rules underlying Minoan morphology.

In practice, however, this method does not produce the hoped-for results. Sundwall (AltKr. 7-25) has worked out tabulations of the types of similarities to be found, on the basis of much more material than appears in the published inscriptions, and without observing the limitations prescribed above, since his purpose in making the lists was a different one.

No coherent picture of the inflection pattern can be built up, even from his amplified lists.

The reason for this is clear: we are dealing with a syllabary, and until we know more about the interrelations of the various symbols, little progress can be made. An example of what this lack of knowledge implies might not be amiss.

Let us suppose, for instance, that Latin was written in a syllabary of the Cypriote type (with separate signs for the five vowels, and all the other signs representing a consonant and vowel combination), and that we know nothing about either the language or the script used. We find two very similar statements, one ending in the word *fecit*, the other in the word *fecerunt*. We would have no way of telling that the words were related, since only the initial sign (*fe*) would be the same for the two words. It would be necessary, before any further progress could be made, to discover in some way that the signs for *ci* and *ce* had the same consonant. After that fact had been established, there might be enough material to show that the sign for *t* and the signs for *runt* alternate with sufficient regularity to permit the supposition that they are inflectional variations. The same difficulty would arise in the case of any thematic inflection; athematic inflections would be even more difficult to trace, since they often involve consonant changes as well.

The present state of our knowledge limits us to the observation of obvious alternations or additions in suffixal, prefixal or infixal signs; their significance, for the most part, escapes us.

In fig. 3, for instance, we can see very clearly that groups C and D show suffixal alternation, and that groups E and perhaps H show a variation achieved by adding a suffixal sign. Group A, however, cannot be explained. Other words occur with the

<sup>12</sup> This is a "cattle" inventory. Sundwall (AltKr. fig. 23) tells us the word occurs four times in "cattle" inventories. This is, however, the only published example.



endings 𐀓𐀔 (B 46, 40) and 𐀓𐀔𐀕 (B 15, 11), but in no other case do the suffixes alternate. It is quite possible that, instead of having here a word stem, represented by the signs 𐀓𐀔 (B 37, 30), we have instead three different word stems, all with the same prefix. If the word-stems all begin with the same sound, only B 37 might be prefixal; on the other hand, the prefix may consist of both B 37 and B 30. The same problem arises with regard to groups F and G.

In group C, five of the words are obviously closely related, and almost certainly inflectional variants of the same word. Not only do they differ from one another in suffix, they also show some internal changes that can be most simply stated by saying that four of them have the infix 𐀓 (B 54), lacking in the fifth, and three the infix 𐀔 (B 31), lacking in two. It is possible, however, that in the form 𐀓𐀔𐀓𐀔𐀓𐀔𐀓, as compared with 𐀓𐀔𐀓𐀔𐀓𐀔, the sign 𐀓 (B 54) is not an infix; that the change in orthography is caused by the presence of a prefix. The two Latin words *avus* and *atarus* furnish a simple illustration of what is meant. Written syllabically, the first would consist of the signs *a*, *vu*, *s*; the second of *a*, *ta*, *vu*, *s*; and the resulting words would seem to show that the second had the infix *ta*.<sup>13</sup>

Further conjecture is useless. The findings of this study may be summarized as follows: it is highly probable that the language of the Linear Class B documents was inflected, but the types of inflection used, and their significance, are still unknown.

BROOKLYN COLLEGE

ALICE E. KOBER

<sup>13</sup> The illustrations given above are taken from Latin because that language is inflected and familiar enough to many people to give the examples some point. There is, of course, no implication that Latin and Minoan are related. In the same way, the principles of the Cypriote syllabary were used to illustrate syllabic spelling because it is one of the simplest syllabaries known. It may have been derived from one of the Minoan script systems (cf. J. F. Daniel, "Prolegomena to the Cypro-Minoan Script," *AJA.* 1941, 249-281, and bibliography listed there), but was certainly not identical with it.



## PEISISTRATOS' LAW REGARDING TOMBS

IN *Archaic Attic Gravestones*, pp. 90 ff., I argued that the anti-luxury decree limiting the size and decoration of tombs which is dated by Demetrios of Phaleron in Cicero, *de legibus* ii, 26, 64, "sometime after Solon" is to be ascribed not to Kleisthenes but to Peisistratos. Professor A. D. Nock has pointed out to me that my contention is supported by Plutarch, *Solon* 31: "He (sc. Peisistratos) retained most of Solon's laws, observing them first himself, and compelling his friends to do so. . . . He also made other laws himself. . . . Moreover, Theophrastos writes that the law against idleness . . . was not made by Solon, but by Peisistratos"<sup>1</sup> (tr. B. Perrin).

The Plutarch passage shows that Theophrastos was interested in laws of Peisistratos. Demetrios, as Professor Nock reminds me, was a pupil of Theophrastos. It is therefore a plausible assumption—in view of the archaeological evidence presented in my book—that when Demetrios tells us of a law regarding tombs passed some time after Solon he is referring to a law of Peisistratos and that his source for this law was Theophrastos.

GISELA M. A. RICHTER

METROPOLITAN MUSEUM OF ART

<sup>1</sup>On Theophrastos, *Nomoi*, see H. Bloch, *Harvard Studies*, Supp. I, 1940, pp. 355 ff.









PLATE VII.—BUYGOS CUP LONDON E 65



## THE BRYGOS TOMB AT CAPUA

### PLATE VII

IN THE *Bulletino dell' Instituto* for 1872 (pp. 37-47) Helbig described a group of tombs which had recently been excavated by Simmaco Doria north of S. Maria di Capua in the contrada Quattro Santi,<sup>1</sup> a few steps from the city, between the modern road to the Volturno and the ancient road to Monte Tifata. Most of the tombs had been plundered in antiquity: the metal objects taken, but the clay vases left.

Tomb I, gable-roofed, contained a single corpse and seven vases. One of these, the Panathenaic amphora inscribed with the name of the archon Niketes (332/1 B.C.), was acquired by Alessandro Castellani, who sold it to the British Museum (B 610: *Mon.* 10, pl. 47d and pl. 48f, 5; *CVA.* III Hf, pl. 4, 3; see *AJA.* xlvii, 1943, p. 460). Another was a "garland-krater" with a gilt ivy-wreath round the body. This was in all probability an Attic calyx-krater of a well-known type: published examples are in Bremen (Schaal, *Griechische Vasen in Bremen*, pl. 32), Naples (*ML.* 22, pl. 106, 5), Rhodes (*CIRh.* 6-7, 171), Ensérune (*CVA.* Mouret, pl. 18, 1; pl. 19, 1 and 4; pl. 19, 5). Berlin inv. 4983 is from the same fabric, but is more squat, having had a separate stand (*Amtliche Berichte* 30, 186, Zahn; Neugebauer, *Führer: Vasen*, pl. 90). I cannot trace the garland-krater from Tomb I. Helbig speaks of an ivy-wreath, which rules out those decorated with olive or vine, including a vase from Capua in the British Museum, the number of which I do not know. There is an ivy-krater in Schwerin, but I do not remember the size. The vase described by Helbig is very large, 70 cm. high. The date will not have been far from that of the Panathenaic — see *JHS.* 59, p. 36, on a second garland-krater in London, 71. 7-22. 3. It may have been because the British Museum had just obtained this vase from Alessandro Castellani that it waived the opportunity of acquiring the vase found in Tomb I.

The five remaining vases from Tomb I were Campanian. All Helbig says about them is that they were bail-amphorae "with the usual sepulchral scenes," and that they were "in a local style resembling, for example, that of the vases published in *Annali* 1865, pl. O." This is not sufficient to identify them, which is unfortunate, as the indication given by the dated Panathenaic would have been useful for the chronology of Campanian red-figure. Something may possibly be made of the little information we have. Helbig had a good eye, and we may perhaps assume that the lost vases were not very much earlier or very much later than the hydria and the bell-krater with which he compared them. (It should be noticed that he quotes these for the sake of the style, not of the subject or shape). Now the lost vases, being local work made for sepulchral use, may have been later than the Panathenaic, but can hardly have been earlier: this gives 331 as a *terminus post quem*. The date of the vases published in *Annali* 1865, pl. O, if they are like the lost bail-amphorae, will have been

<sup>1</sup> In giving the provenience of ancient objects, the word Capua is often used to signify not the modern city but the ancient — the present S. Maria di Capua. This is perhaps a pity, but by Capua in such a context I have always meant S. Maria, and so in this article.



not very far from 331 B.C. "Not very far" is a roomy expression, but I should not care to make it more precise.

The vases figured in *Annali* are both in Naples: pl. O, 1 is the bell-krater 776, from S. Agata de' Goti; pl. O, 2-3, the hydria 874, which has been republished by Patroni (*La ceramica nell' Italia meridionale*, 90). I did not mention them in my paper on Campanian red-figure (*JHS.* 63, 66-111), because I did not know where exactly to place them. They are not in the same style, but are not unlike each other, and belong at least to the same stage of development: they are somewhat earlier than the work of the C. A. Painter (*ibid.*, 85-88), to which they bear a certain resemblance, as if preluding to it. A bell-krater in Toronto (407: A, Tischbein 5, pl. 61; Robinson and Harcum, pl. 76) goes with the Naples hydria 874. A bell-krater by the C. A. Painter, Toronto 402 (*JHS.* 63, 87, no. 33) is figured by Robinson and Harcum on the same plate of their catalogue, and it is clear that if the lost bail-amphorae were by the C. A. Painter, Helbig would still have been justified in comparing them with the vases published in *Annali*.

Helbig added that there was a hole in the roof of the tomb big enough for a man to pass through, and that the garland-krater was found on the floor below it, "turned upside down to serve as a steppingstone for the robbers as they dropped into the tomb": or rather as they climbed out of the tomb?

Tomb III was excavated by Simmaco Doria before the other tombs, in 1868. It was not a single interment: as many as twenty skeletons were found. The wall-paintings have perished, but Schulz's drawings of them have been published by Weege in *JdI.* 24, pp. 108-9. The Campanian vases from the tomb cannot be traced: all Helbig says is that they were of the same shape as those in Tomb I (namely, bail-amphorae), that they represented sepulchral scenes, and that they were of the worst local fabric. The five Attic vases, on the other hand, can all be identified:—

Helbig's nos. 2 and 3 are hydriai by the Niobid Painter in his middle period. One of them, with Boreas and Oreithyia, is in Basle (*Mon.* 9, pl. 17, 2: *ARV.* p. 423, no. 55). The other, with Apollo, Artemis and Leto, was formerly in the Botkin collection and is now in Leningrad (*Mon.* 9, pl. 17, 1; Webster, *Der Niobiden-Maler*, pl. 21, a: *ARV.* p. 423, no. 58).

Helbig's no. 5 is a neck-amphora by the same artist, the Niobid Painter, in New York (GR 579: Richter and Hall, pl. 100 and pl. 169, 97: *ARV.* p. 422, no. 50): on one side, Dionysos and maenads; on the other, a king and two women: middle period, as Webster saw (*op. cit.* p. 23), like the hydriai. It was formerly in the collection of Thomas B. Clarke, New York, and is said in the sale catalogue (1899, ii, 60, no. 371) to have been found at Nola. Capua may now be substituted for Nola.

Helbig's no. 4 is a neck-amphora with twisted handles, by the Painter of the Berlin Hydria, in Leningrad (*Compte Rendu* 1874, pl. 7, 1-3; *ARV.* p. 429, no. 4). Helbig calls it "an amphora with volute handles" (that is, a volute-krater), but his description corresponds so exactly to the neck-amphora in Leningrad that I do not hesitate to identify the two vases: Helbig has made a slip, had put "volute handles" for "twisted handles" in his notes. The Leningrad vase had just been acquired by Count Sergei Stroganoff when Stephani described it in 1873 (*CR.* 1873, pp. 129-130, no. 116 a). Stephani said that it had been obtained in Nola; later, that it had been



found near Nola (*CR.* 1874, p. 204). I venture to think that there is a second confusion here: Nola for Santa Maria di Capua. Two confusions may seem much to assume: but I beg the reader to peruse Helbig's description and compare it with the reproduction of the Leningrad vase; and to remember that the New York neck-amphora was also reported to come from Nola, although Helbig says it was from Capua.

A third confusion need not trouble us much: Salomon Reinach, in his *Répertoire* (i, 45), gives reduced cuts of *Compte Rendu*, 1874, pl. 7, and runs the two vases figured there into one:—the archaic neck-amphora by Douris (*CR.* 1874, pl. 7, 4–6; *AA.* 1930, 29–30; *ARV.* p. 292, no. 202), and the thirty-years-later vase by the Painter of the Berlin Hydria (*CR.* 1874, pl. 7, 1–3), the pictures on which are said to be “below the others.” So they are—on Stephani's plate. The provenience which Reinach gives for his pasticcio is Capua: this is repeated from the provenience given by Stephani for the Douris vase, which was in fact discovered at Capua (*Bull.* 1871, p. 122). Reinach is right in stating that the vase from which his two lower cuts are taken was found there: but the process by which he arrived at this conclusion deserves no special praise.

Helbig's no. 1 is the neck-amphora with Achilles and Penthesilea, by Polygnotos, in the British Museum (E 280: *Mon.* 10, pl. 9, 1; *CVA.* III 1c, pl. 16, 1 and pl. 12, 3; *ARV.* p. 679, no. 32).

It is not possible to say which vases in Tomb III belonged to which interments. The local bail-amphorae, however, must have been from a later burial or burials than the other vases. The two hydriai, and the neck-amphora in New York, belonging to the middle period of the Niobid Painter, are to be dated about 460–450. The Painter of the Berlin Hydria, author of the neck-amphora in Leningrad, was a follower of the Niobid Painter, and his vase may be put about the middle of the fifth century or not much after. The London neck-amphora by Polygnotos is later, say 440–435: but for all one can tell it may have belonged to the same interment as the earlier vases: a glance at the tombs of Bologna or Spina would show that, if any authority were necessary.

Heydemann stated in *Annali* 1870, p. 223 that the London hydria by the Coghill Painter (E 170: *Mon.* 9, pl. 28; *CVA.* III 1c, pl. 75, 2 and pl. 77, 1; *ARV.* p. 688, no. 2) was found in the same tomb as the two hydriai by the Niobid Painter and the London neck-amphora by Polygnotos: but when he came to publish it he said no more than that it was “from the same excavations” as the two hydriai (*Annali* 1871, p. 107).

The wall-paintings of Tomb III (*JdI.* 24, pp. 108–9) are earlier in style than any of the contents. Weege dates them about 470 (*ibid.* pp. 129–130 and 141), which is probably not far from the truth, although here also the argument is open to criticism. Instead of starting from the earliest vases in the tomb, he starts from the Polygnotos, which he dates too early, about 470–460, quoting Hauser for this date (*FR.* ii, p. 306), but Hauser says nothing of the kind. However, all's well that ends well.

If 470 is the date of the wall-paintings, there is a gap between them and the earliest of the tomb contents. It may be that the trappings of the first interment have not been preserved. There is another possibility: it seems always to be assumed that



tombs in Italy were made subsequently to the demise of the occupant: but sometimes, surely, the tomb may have been built, decorated, and finished well before it was expected to be used. Lastly, I doubt if we can be quite certain that 460-450 is too advanced a date for sub-archaic wall-paintings in Italy.

Tomb IV had wall-paintings: what remained of them is in Dresden, and is published in *Mon.* 10, pl. 55, 2: see Weege in *JdI.* 24, p. 110, no. 19 ff. The tomb contained a hydria with reeded body and a gilt garland round the neck: this was no doubt of the same Attic fabric as the calyx-krater from Tomb I. There are many such hydriai, of all sizes, with reeded body and a gilt wreath or necklace, or both: a good example is published by Genick (pl. 32, 2): see also Breccia, *La necropoli di Sciatbi*, pl. 35, 43, pl. 36, 44, pl. 50, 84, and Robinson and Harcum, *Greek Vases at Toronto* 251, on no. 543. I note that Count Grigori Stroganoff had one (Pollak and Muñoz, *La Collection Stroganoff*, pl. 43, 2): and about this time he bought many vases from Alessandro Castellani which had been found at Capua by Simmaco Doria and others. But Helbig does not even give the height of the hydria from Tomb IV, so there is little hope of identifying it.

Tomb V yielded no vases. Tomb VI—a rough tomba a cassa—only a black cup with the Campanian graffito *maifnastami*. This is the Attic stemless Yale 442, part of which is published by Hoenigswald in *AJA.* 1941, p. 583, fig. 1.

That brings us to Tomb II, “the Brygos Tomb:” a large tomba a cassa containing a single corpse. The flat lid, broken into several pieces, showed that the tomb had been plundered in antiquity. Only the vases had been left. But what vases!

The first was the famous cup signed by the potter Brygos, with Hera and Iris assaulted by satyrs and defended by Hermes and Herakles: London E 65 (*FR.* pl. 47, 1 and i, 239, whence Hoppin *Rf.* i, p. 110; I, Richter and Milne, p. 29; A, Bloesch, *Formen attischer Schalen*, pl. 36, 2, whence fig. 2; I, pl. vii:<sup>2</sup> *ARV.* p. 247, no. 13, and p. 956).

The second was the Triptolemos skyphos signed by the potter Hieron and painted by Makron: London E 140 (*FR.* pl. 161 and iii, p. 259; Hambidge, *The Diagonal* i, pp. 114-5, 11, 4-5; *CVA.* III, 1c, pl. 28, 2: *ARV.* p. 301, no. 3 and p. 958). It is strange that the fact of these two masterpieces being found in the same tomb has never been mentioned, so far as I can find, in any reference to either the cup or the skyphos subsequent to Helbig's original account. It is indeed recorded in the British Museum catalogue: not, however, in the description of either the skyphos or the cup, but on p. 374 in the notice of another vase from the same tomb.

The third vase from Tomb II is described by Helbig simply as “a rhyton ending in a ram's head.” According to Cecil Smith this is London E 795 (*CVA.* III, 1c, pl. 41, 2 and pl. 42, 2). The picture of a symposion which decorates the upper part is by the Syriskos Painter (*ARV.* p. 198, no. 40). It is perhaps a little strange that Helbig does not mention the picture, and this has made me wonder whether the

<sup>2</sup> The photograph, taken for me by R. B. Fleming, is wrongly poised, and I have had to fill in four cantles with black paper.



ram-head from Tomb II may not have been London E 800, rather than London E 795. E 800, which was acquired from Castellani in 1873, the same year as the cup and the skyphos, and said to be from Capua, has no figurework, only an ivy-wreath (*CVA*. III, 1c, pl. 43, 2). It is from the fabric of Sotades (*ARV*. p. 453, no. 11), and the drawing of the ivy is just the same as in other vases from that fabric: Petit Palais 373, London E 801, probably also Compiègne 898 and Victoria and Albert Museum 669. 1864 (*ARV*. p. 453, nos. 11 bis, 16, 15, 14). I do not press this conjecture, especially as a good many vases from Capua were obtained from Castellani by the British Museum in 1873.

The fourth vase from Tomb II is also in the British Museum. As Cecil Smith noted, it is the sphinx-rhyton E 788 (*JHS*. 8, pll. 72-3, whence *FR*. iii, p. 93; *CVA*. III 1c, pl. 40, 1 and pl. 42, 1: *ARV*. p. 451, no. 7, and p. 960): made by Sotades, and decorated by the Sotades Painter, it is among the finest of Attic plastic vases, if not equal as a work of art to some of the less elaborate pieces. The Capuans had a special fondness for the plastic vases of Attica, and many have been found at Capua: one example only: Helbig reports (*Bull.* 1873, 4-5) that a tomb with a single interment, discovered by Francesco Focone near S. Maria di Capua, contained three plastic vases: all these can be identified: they are the head-vase New York 12. 234. 5, with pictures by the Brygos Painter (Richter and Hall, pl. 43 and pl. 178, 43: *ARV*. p. 254, no. 137, and p. 899, below, no. 3), the bird-vase Leningrad 682, with pictures in the manner of the Brygos Painter (*Compte Rendu* 1872, pl. 4, 1-2: *ARV*. p. 261), and the lobster-claw askos which passed from the collection of Grigori Stroganoff to New York (23.160. 57: Pollak and Muñoz, *La collection Stroganoff*, pl. 42; *BMAA*. 20, p. 130, fig. 5).<sup>3</sup>

The remaining vases from Tomb II were a pair of red-figured stamnoi (not "Nolan amphorae" as Cecil Smith) "which may be seen," in Helbig's words, "from the perfect identity of proportions and ornaments to have doubtless been made as companions." One of these handsome, conventional pots is Karlsruhe 211 (Welter, *Aus der Karlsruher Vasensammlung*, pl. 13 and pl. 12, 2: *ARV*. p. 326, no. 5), the other, New York 18. 74. 1 (Richter and Hall, pl. 87 and pl. 173, 83: *ARV*. p. 326, no. 2). They were not only decorated by the same man, the Deepdene Painter; but fashioned by the same potter, and with them the other thirteen stamnoi in the list of the Deepdene Painter's vases (*ARV*. p. 327-7).<sup>4</sup> The name of one potter whose work was decorated by this painter is known: Oreibelos. Oreibelos may have been the potter of

<sup>3</sup> The New York vase belongs to the early classical period. Other lobster-claw askoi are from the same workshop as it and doubtless by the same potter, although no two of the group can be said to have been decorated by one painter: Cassel (Eros; flower); Berlin inv. 3405, from Greece (Nike; fish); Toronto 355, from Vulci (Robinson and Harcum, pl. 58 and p. 162: youth reclining; flute; from an ambiguous sentence in the text of the catalogue it might appear that I had once attributed this vase to the Syriskos Painter, but it is not so). Lobster-claws in Genoa (fox and donkey; flower) and London (E 765, from Nola: Gargiulo, *Recueil* 2, pl. 23; Panofka, *Cab. Pourtales*, pl. 30, 1: fox and fawn; flower) may also be from this workshop. I have not enough information about two others: London W. T. 63 (palmette; wreaths) and another in London (*Burl. Cat.* 1903, pl. 97, I 68: fox and cock; dog). One in Bari is very like London W. T. 63. Petit Palais 410 (*CVA*. pl. 47, 11 and 14) is of nearly the same type as all these, but not from the same fabric as our group. Yale 175 (Baur 114) belongs to the fourth century, is of a different type, and served a different purpose.

<sup>4</sup> No. 9, Brussels A 3093 (*Collection du Docteur Bougard, Bruxelles, 9 mai 1932*, pl. 3, 98) was also found at Capua (*Bull.* 1880, p. 482).



the stamnoi too, but it would be hard to show it: the vase which Oreibelos dedicated to Athena on the Acropolis of Athens and signed with his name was a small volute-crater, and only a fragment of it remains, which is not easy to compare with the stamnoi (Langlotz, *Die antiken Vasen von der Akropolis zu Athen*, pl. 62 and p. 72: *ARV*, p. 327, no. 16).

The date of the finest vases in Tomb II, the Brygos cup and the Makron skyphos, is between 490 and 480. The Syriskos Painter's ram-head was probably painted about 480. The Sotadean sphinx is later, about 460; and that is the date of the Deepdene Painter's stamnoi. The cup and the skyphos must have been treasured for many years before they were placed in the grave. Treasured, it may be, by more than one owner—father and son, father and daughter's husband. Treasured as wonders, not of minor art or industrial art (in the shoddy jargon of today or yesterday), but of art pure and simple: not *πάγχρυσα*, although there are touches of gold on the Brygos cup; but peak of possessions, *κορυφαῖα κτεάνων*.

J. D. BEAZLEY

OXFORD



FIG. 2.—BRYGOS CUP, LONDON E 65



1945  
April-June

ARCHAEOLOGICAL NEWS AND DISCUSSIONS  
NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS  
SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN  
CURRENT PUBLICATIONS

STEPHEN B. LUCE, *Editor-in-Charge*

Fogg Museum of Art, Harvard University, Cambridge, Mass.

NECROLOGY

Frederick William Shipley, President of the Archaeological Institute of America from 1913 to 1917, and Honorary President of the Institute since that date, died in St. Louis on February 11, 1945, at the age of seventy-four. He was born in Cheltenham, Ont., on January 15, 1871, and was graduated from the University of Toronto in 1892, receiving the honorary degree of Litt.D. from his Alma Mater in 1925. From 1895 to 1897 he was a member of the American School of Classical Studies at Rome, and in 1901 received his Ph.D. from the University of Chicago, where he had held an Assistantship in Latin in 1897 and 1898. After receiving his doctorate, he went as Professor of Latin to Washington University in St. Louis, where he remained for forty years, less the academic year 1928-29, when he was Annual Professor at the School of Classical Studies of the American Academy in Rome. He became *emeritus* in 1941. Besides his honorary degree from Toronto, he was also given the degree of LL.D. by Colorado College. At Washington University, besides his professorial duties, he was Director of University Extension (1914-31), Director of Summer Sessions (1923-25), Dean of the University College (1931-32), Dean of the College of Liberal Arts (1932-37), and Dean of the School of Graduate Studies from 1937 to 1941, when he became Dean *emeritus*. During his tenure of office as President of the Institute, he was an Honorary Editor of this JOURNAL, an *ex-officio* member of the Managing Committee of the School at Athens, the boards of the Schools at Jerusalem and Santa Fe, and the Advisory Committee of the School of Classical Studies of the American Academy in Rome. He was Editor of the *Bulletin* of the Archaeological Institute in 1912, and Editor of *Art and Archaeology*, and Chairman of its Board of Publication, in 1917-18. Besides the Institute, he was a member of many other learned Societies, being at one time Vice-President of the American branch of the Egyptian Research Ac-

count, and Chairman of the Committee on Monographs of the American Philological Association, from 1929 to 1933. His bibliography of books, articles, and reviews is very large, but almost exclusively in the Roman field. Of interest to archaeologists are his edition of Velleius Paterculus in the *Loeb Classical Library* (1924), *Chronology of Building Operations in Rome from the Death of Caesar to the Death of Augustus* (1931) and *Agrippa's Building Activities in Rome* (1933). Professor Shipley was President of the Institute in the unsettled early days of the First World War, which brought to his office many perplexing problems. By his industry, conscientiousness, and never-failing courtesy and considerateness, he kept the torch aglow for his successor to carry, and developed an excellent organization to weather the abnormal conditions imposed on the Institute by the War. His widow, whom he married in 1899, survives, with two sons. S. B. L.

Adolph Goldschmidt. — *College Art Journal* iv, pp. 47-50, prints an appreciative obituary of this great scholar by KURT WEITZMANN. Goldschmidt died on January 5, 1944, in his eighty-first year, at Basel, Switzerland, where he had lived in retirement for the last years of his life. "His contribution to the history of art cannot adequately be judged by his writings alone. He saw his chief task in the dissemination of knowledge through teaching and the training of research scholars." His career began as Privatdozent in Berlin in 1892, when he first concentrated his attention on mediaeval art, particularly in the fields of German mediaeval sculpture, and manuscript illumination. From 1904 to 1912 he held a professorship at Halle, returning thence to the University of Berlin, where he remained for more than twenty years as head of the Art Department. He came twice to America, and gave courses at Harvard, receiving honorary degrees from that University and from Princeton. Besides teaching, he was also a practicing artist, and his watercolors and line drawings are well known.



**Walter Haring.**—C. R. MOREY pays a tribute to this promising young scholar, who died in Mérida, Yucatan, on May 11, 1944, in *College Art Journal* iv, pp. 50–51. He was graduated from Princeton in 1921, and spent the academic year 1922–23 there in the Graduate School. His academic posts were at Dartmouth, Columbia, and finally Associate Professor of Art at Barnard College. His principal interest was in Spanish Colonial Art, and it was in the course of study of this subject in the field that he died. He was considered to be one of the best undergraduate teachers of his generation.

**William Henry Campbell.**—*The Masterkey* xviii, 1944, pp. 136–138, publishes an obituary notice of W. H. Campbell, a Trustee of the Southwest Museum, who died on June 3, 1944. Reaching college age at the time of the entry of the United States into the First World War, he enlisted immediately in the Army, serving on the Italian front, where he was decorated for bravery in action. On his return he married and settled in California, as his health was seriously impaired by having been gassed during his military service. He conducted archaeological explorations of the caves and camp-sites in the Twentynine Palms area of the California desert region, the first results of which were published in 1931. This work pointed to the existence of a Pleistocene culture in that area, and further researches were made, the results of which were published in 1935 and 1937. This work was ultimately extended to Nevada, where he became a resident, with results still to be brought to their final conclusion. "In him, archaeology has lost an enthusiastic and industrious advocate."

**Harry Edwin Burton.**—Announcement is made of the death, on March 20, 1945, of this eminent Latinist at the age of seventy-six. He was born in Boston, and was graduated from Harvard in the Class of 1890, receiving his A.M. in 1893, and his Ph.D. in 1895 from that University. In 1895–1896 he studied at the American School of Classical Studies at Rome, belonging, like Professor Shipley, whose obituary appears above, to one of the first group of students at this institution. On his return to America in 1896, he began his long career at Dartmouth College, as Instructor, becoming Assistant Professor in 1898, Professor in 1903, and Daniel Webster Professor of Latin in 1916. In 1938 he became *emeritus*, and continued to live at Hanover, where he took a leading part in town affairs, and where he died. Pro-

foundly interested in archaeology, he gave courses in the Roman branch of the subject at Dartmouth, and was for many years a member of the Boston Society of the Institute. He will be greatly missed as one of the leaders in that group of eminent scholars which gave to Dartmouth its great distinction in the Classics over a long period of years.

S. B. L.

#### GENERAL AND MISCELLANEOUS

**News-Letter on Art and Archaeology.**—The Office of War Information has added to its series of news-letters for circulation in neutral and occupied countries a monthly letter summarizing recent work by American scholars in the fields of the history of art and of archaeology. These letters are sponsored by the Archaeological Institute of America and the College Art Association. The editors are MILLARD MEISS of Columbia University for the history of art, representing the Association, and STEPHEN B. LUCE, who represents the Institute. The summaries of the more important books and articles are contributed by the authors themselves, and each news-letter contains several illustrations. Readers of this JOURNAL who have recently published books or articles on archaeology are urged to send abstracts, in no case to exceed 300 words, to Stephen B. Luce, Fogg Museum, Cambridge 38, Mass. They may, if they see fit, submit one illustration for reproduction per book or article, which will be included if space permits.

**Inscriptions and Classical Literature.**—In *CJ.* xl, pp. 148–167, WILLIAM and GEORGINA BUCKLER discuss the bearing of inscriptions on Classical literature and history. After a brief introduction, in which it is stated that inscriptions have "become more and more indispensable to ancient books as their interpreters and amplifiers," the article is divided into two parts: (1) the mention of writers in inscriptions, and (2) the bearing of inscriptions on their works. Under the first heading there are two kinds of record, the contemporary and the posthumous. Of the first type, coins play an important role, in the portrayal of kings and emperors, many of whom were authors in their own right. Of other writers, M. Terentius Varro, the antiquarian, and Silius Italicus, the poet, appear on coins in their official capacities. Certain Greek cities issued coins in memory of citizens of whom they were proud—Homer, Herodotus, Sappho and others figure in this list. Portrait busts or statues of famous writers often



have their names inscribed on their bases—a long list of these is given. These are for the most part Roman copies of Greek originals, dating in the second or third century A.D., and testify to the esteem in which they were held; but the custom goes back beyond that, as the excavations of the royal library at Pergamon yielded shafts of portrait herms with authors' names, dating in the second century B.C. Mosaics with inscribed portraits of Thucydides, Menander, Hesiod, Ennius and Vergil are preserved. Three important inscriptions are then commented on—the first, *IG. ii²*, 3090, dated in 401 B.C., records dramatic victories of Sophocles and Aristophanes; the second, *IG. ii²*, 2318, 11, 51, of about 325 B.C., is an Athenian list of successful dramatic productions, including Aeschylus in 473 and 459, thus confirming the literary evidence for the latter date; while the third, the famous *Marmor Parium*, lists the dramatic honors won by Aeschylus, Sophocles and Euripides. Another inscription, *IG. ii²*, 3091, found at Axone near Athens, registers performances of Timotheus, Cratinus and Sophocles. It belongs ca. 400–375 B.C. The little known political career of Sophocles has had some light thrown on it by the discovery of a tribute list (*IG. i²*, 202 f.) showing that in 443/2 he presided over the Hellenotamiae. An inscription from Tegea, dated about 150 years after his death, attests the lasting popularity of Euripides (*Syll.* 1080), as it commemorates an actor who had played in four of his tragedies. A number of authors of Hellenistic times, whose works are not preserved, are known to us by inscriptions. Demosthenes is proven by two inscriptions (*IG. ii²*, 1623, 166 and *ibid.* 1629, 526) to have supported the war against Macedon, not only by his speeches, but out of his own purse. Aristotle is honored on an inscription from Delphi of 335 B.C. (*Syll.* 275) for having compiled a list of Pythian victors. Three inscriptions record honors awarded to Polybius as a statesman, and three memorials of Plutarch have been found, one of which shows that he was a Roman citizen—a fact not even hinted at in any of his writings.

Turning to Roman writers, the only non-Imperial one to receive monumental notice is Cicero. In *Syll.* 747, a Greek translation of the minutes of a session of the Senate, he is listed as one who recommended the exemption from taxation of land belonging to the temple of Amphiaraios. At Samos an inscribed exedra has been found, attesting the gratitude of the Samians for

his prosecution of Verres, while his bust (now lost) was set up at Sardis, with complimentary verses still preserved. The epitaph of Livy, with the names of his wife and sons, is preserved, while the best known Latin inscription of this sort is the official record of the *Ludi Saeculares*, with its reference to Horace's *Carmen Saeculare*.

Certain Roman writers figure in inscriptions as a result of their official positions. Thus L. Cornelius Bocchus, a writer cited by the elder Pliny, was a Spanish provincial high priest and military tribune; Hyginus appears to have been a manager of a burial guild; Juvenal was probably (although this is disputed) the dedicator of an inscription discovered at Aquinum, where he figures as commander of a cohort serving in Britain; Tacitus, Silius Italicus, and Frontinus appear as proconsuls in Asia. The gifts and benefactions of the younger Pliny are attested by several inscriptions.

The second section of the article deals with the works of Classical authors, as preserved on inscriptions. Fragments of Archilochus are preserved on an inscription from Paros; part of an ode of Sappho appears on a potsherd found in Egypt; no less than six inscriptions give verses of Simonides; part of a paean of Sophocles is preserved on an inscription from the Serapeum on the Acropolis at Athens; while the only known work of the fourth century B.C. poet, Ariphron of Sicyon, given in Athenaeus, has also come down to us in inscriptions from Athens and Epidaurus. Three poets, Ion of Samos, Pantaleos, and Herodes, are only known to us by their works as preserved in inscriptions, their very names having disappeared from literature. From Herodes Atticus we owe to inscriptions verses and prose commemorating his wife. At Trier was found a poetical dedication to Hermes, in Greek, attributed to the emperor Julian. Other examples of prose writings on Greek inscriptions are cited.

In Latin poetry, the graffiti at Pompeii yield quotations from Lucretius, Vergil, Ovid, and Propertius, while quotations from Vergil also appear on mosaics. Among the most important authorities for the study of Roman law are the bronze tablets from Osuna near Malaga, probably compiled by Mark Antony: other tablets from this place date from the age of Domitian. But surpassing all other Latin inscriptions are, of course, the *Res Gestae Divi Augusti*, preserved at Ankara, Pisidian Antioch, and Apollonia. There are also letters from Julius Caesar, Augustus,



Hadrian, and Marcus Aurelius; speeches by Claudius, Hadrian, and Marcus Aurelius, and poems by Hadrian. Other instances are given, of writings, otherwise unknown, that are thus preserved.

In conclusion, the writers give three instances which they consider "of rather exceptional character." The first are the ostraka of Aristides, found in the Agora excavations, as well as those giving other names, such as Alcibiades, Pericles, Themistocles, and names unknown to history. The second instance shows that an inscription proves the truth of the custom of the Locrians of sending two noble maidens each year to Troy, to serve in the temple of Athena, in expiation for the outrages of Ajax. The third suggests that the mythical King Arthur of England was in reality a Roman, Lucius Artorius Castus, commander under Hadrian and Antoninus of the sixth Victrix Legion, who, according to an inscription, led an expedition against the Armoricans. This inscription, found at Spalato, on a coffin, shows that instead of dying in England, Arthur ended his days on the Adriatic.

**Damage to British Museum.**—In an address at the Metropolitan Museum in New York, on January 15, 1945 (quoted in *The New York Herald-Tribune*, for January 16) SIR JOHN FORSDYKE, Director of the British Museum, revealed that since the war, the Museum had been hit by six high explosive bombs, which did "comparatively little damage," and by "countless" incendiary bombs which started fires that completely ruined some sections of the building, particularly in the book-stacks, where thousands of books were destroyed. He tells of the loss to the newspaper collections, giving figures of 10,000 rare volumes as completely lost and 15,000 damaged. He lists the galleries that have been destroyed, but states that the objects they housed had all been previously removed to places of safety.

**Iron Age Discovery in Wales.**—SIR CYRIL FOX contributes to *ILN*, Nov. 25, 1944, pp. 611-613 (19 figs.) an account of the deposit, discovered in 1943 in the peaty margins of Llyn Carrig Bach near Valley, Anglesey, and now in the National Museum at Cardiff. This is the deposit previously described in the *London Times* for March 7, 1944, and summarized in this *JOURNAL* (xlviii, 1944, pp. 277-278) but the different objects found are excellently illustrated, and there is a map, showing the distribution of finds of "currency bars" in England and Wales. This find of "currency bars"

is the second from the more northerly parts of Britain. Each kind of object is carefully described, and its purpose given. The dates as given in the *Times* are adhered to in this article, and attention is invited to the fact that nothing of a definite Celto-Roman character was included, making the latest date for the deposit the middle of the first century A.D.

**Sword Moulds vs. Currency Bars.**—Under this title, E. WYNDHAM HULME has an article in *The British Steelmaker* for August, 1944, a revision of which (6 pp., 5 figs.) has reached the editorial office of this *JOURNAL*. The writer takes exception to the use of the term "currency bars" and maintains that those objects must be half-fabricated swords, or sword moulds, which awaited their finishing process. His arguments are largely based on metallurgical grounds. He believes that most of them must date in the Roman period, and considers that they were probably intended as a cavalry weapon. The article ends by a fling at the lack of knowledge of metallurgy shown by most archaeologists, and quotes "an ex-President of the United States" (doubtless Herbert Hoover) in this connection. An Appendix devotes a paragraph to Greek smithing, publishing the well-known vase in Boston in which a blacksmith's shop is shown.

**Silos, Catalonia.**—Excavations conducted by FATHER SATURIO GONZALEZ of the Benedictine Monastery at this place have unearthed a strongly fortified town, of importance about 100 B.C., but which bears indication of having been inhabited for about 1500 years. Bronze Age, Hispano-Roman and Hispano-Visigothic objects have been found. These discoveries have helped to clear up some points regarding the first Aryan invasion of Spain, and throw light on the Roman and Visigothic periods in Spanish history (*College Art Journal* iv, p. 53).

**Madrid.**—The reorganization of the National Museum of Archaeology, begun in 1939, has now been completed, and the collection is now arranged chronologically. Recently a new section was opened, for the installation of objects acquired since 1939 (*College Art Journal* iv, pp. 53-54).

**Southwestern Arabia.**—FREYA STARK has an article in *Geog. Rev.* xxxiv, 1944, pp. 349-364 (12 figs.), describing a visit to this inaccessible area in wartime. She speaks of the Yemen as "a paradise for archaeologists" (p. 350), although permission to visit it is still denied. Most of the article deals



with the writer's personal experiences, but in San'a, the capital city of the Imam Yahya, there is a small museum, containing a full-size bronze statue, described as Hellenistic, as well as Sabeian inscriptions and sculpture, and coins, which have on the obverse the Athenian owl. A brief sketch of the writer appears in *ibid.*, p. 484.

**Mamluk Glass Bottle.**—M. S. DIMAND calls attention to the magnificent collection of Syrian Islamic enameled glass in the Metropolitan Museum, dating in the thirteenth and fourteenth centuries. The centers of this industry were Aleppo and Damascus, and their wares were exported all over the East, reaching even China. From Syrian workmen the art of enamel painting on glass was introduced to Venice. Particularly important, and perhaps the most magnificent specimen known, is a bottle recently acquired by the Metropolitan, formerly in the collection of the Austrian Imperial family, and exhibited for many years in the Kunsthistorisches Museum in Vienna. The gilt and enameled decoration covers almost its entire surface. The gilt was first applied, outlines being rendered with a pen, after which a preliminary firing was given. The design was then outlined in red, and the various colored enamels were applied, and then the final firing in a muffle kiln took place. On the shoulder of this bottle there are very elaborate medallions, with vine patterns in the spaces between them. The body is decorated with a frieze of mounted warriors, fighting with various weapons, doubtless a battle between Arabs and Mongols. There is much evidence of Chinese influence in the treatment of the subject. Other Mamluk glass vases in the collection are briefly described and illustrated (*BMAA*, n.s. iii, 1944, pp. 73-77; 5 figs.).

### EGYPT

**Egyptian Weaving.**—In *BMAA*, n.s. iii, 1944, pp. 24-29 (4 figs.) CHARLOTTE R. CLARK discusses this subject. Egypt may justly be called "the cradle, if not the birthplace" of linen. Specimens of linen exist that can be dated in early predynastic times, before 4000 B.C. Besides mummy wrappings, sheets and other household linens have been found, in grades ranging from as coarse as burlap to fine, sheer linen lawn. All linen was hand woven, and the operators could select the grade of fibers for spinning. The looms had not only a breast beam, but a warp beam as well, which made a close, tight weave possible. This is proven by tomb-paintings, and, still more important, by

funerary models, one of which, dating about 2000 B.C., from the tomb of Meket-Rē at Thebes, found by the Metropolitan Museum's Egyptian Expedition in 1920 and now in Cairo, is described. A similar model was later discovered and purchased by the Museum, and, after being restored, has been placed on exhibition, and is here published. The weaver's shop is represented as a rectangular room or court. First the fibers are prepared for spinning. Then the fiber is spun into thread with a spindle and whorl. The distaff was not known in Egypt until Roman times. The thread is then ready for warping. A four-post warping frame was used for short pieces of weaving, while for a longer warp three pegs were driven into the wall behind the loom. The loom is horizontal, a type commonly used in the Middle Kingdom. Some of this loom has been restored, and the threads on the loom and warp frames are modern. The method of operating the loom is fully explained, and evidence is given to show that the restorations made are correct and accurate.

**Egyptian Domestic Life.**—*ILN*, January 6, 1945, pp. 23-25, reprints, with appreciative comment, photographs from the recent "Picture Book" of the Metropolitan Museum in New York, by NORA E. SCOTT, on *The Home Life of the Ancient Egyptians*. The principal items that appeal to this publication are the children's toys, the interesting game board, with men, of Hounds and Jackals, and examples of table-ware, furniture, and toilet articles.

### MESOPOTAMIA

**Mesopotamia.**—*PEQ*, July-October, 1944, refers to SETON LLOYD's reports on excavations at Tell Hassuna in Northern Iraq, near Shura on the Tigris, a little south of the site of Nineveh. A burial found in the lowest stratum of these excavations represents the earliest human remains yet found in Iraq and goes back to Neolithic times. These excavations prove that the Samarra ware is earlier than the Tell Halaf period. The new Hassuna culture has undoubted Western affinities; its inception may be dated at the beginning of the fifth millennium B.C.

**'Aqar Qūf.**—In *Iraq*, Supplement 1944, TAHIA BAQIR has an article on "Iraq Government Excavations at 'Aqar Qūf, 1942-1943." In May, 1942 the Directorate-General of Antiquities decided to make soundings at 'Aqar Qūf, 20 miles west of Baghdad; this is the site of the Kassite city called Dūr Kurigalzu. The excavation was



directed by Taha Baqir, curator of the Iraq Museum, under the guidance of Seton Lloyd.

Of special interest is the ziggurat, which has a base measuring 69 by 67.60 metres; the four corners were oriented to the four points of the compass. The face has a considerable batter, receding 9 cm. from the vertical for every one metre of height. Each side has seven buttresses with shallow recesses between. It is constructed of large well-tempered *liben*. In the center of the southeast side were found traces of a staircase built of kiln-baked bricks; the axial flight had flanking stairs on each side, making a triple approach similar to what is found at Ur and elsewhere. The sides of the staircase also have buttresses and recesses. Many stamped bricks in the structure bear the name of Kurigalzu. A great mass of brickwork represents the denuded core of the ziggurat, which rises 57 m. above the level of the plain. Its state of preservation proves the excellence of its construction. After every 8 or 9 courses of bricks there is a layer of reed-matting which is bedded in about 8 cm. of sand and gravel. The reeds still have a tough texture. They were also used to make great plaited ropes about 10 cm. in diameter, which at short intervals run through the structure from side to side and serve as a reinforcement. Excellent plates illustrate the ziggurat and its details of construction.

Four temples have been partially excavated: (1) É-U-GAL, dedicated by Kurigalzu to Enlil; (2) É-GAŠAN-AN-TA-GAL, to Ninlil; (3) É-SAG-DINGIR-E-NE, to Ninurta; (4) É-SAG-DINGIR-E-NE, to Enlil. É-U-GAL, meaning probably "the House of the Great Lord," appears to have been the most important temple of Dûr Kurigalzu; the name, however, may even refer to the temple precinct or the whole complex of buildings, since the name appears in the first three temples listed above.

The *liben* walls of the temple are thick and well built; they average 3.5 m. and are built of solid brick. The baked brick pavements are sometimes heavily coated with bitumen. Among the discoveries were fragments of a diorite statue, probably of King Kurigalzu himself; it was beautifully inscribed in Sumerian with accounts of his deeds and accomplishments.

There are some inscriptions that may serve to date these structures. Clay tablets dating from the eighth year of the Kassite King Šagarakti-Šuriaš were found on a pavement, but if the temples were built by Kurigalzu II, the original occupation would be about 150 years earlier. There was found, however, near the pavement, a frag-

ment of a boundary stone dated in the fifth year of King Nazi-Maruttaš; this may be a reason for dating the pavement about 50 years before the time of Šagarakti-Šuriaš. The latest occupation of the actual temples is dated by a tablet fragment of the Neo-Babylonian period. It should also be noted that the buildings so far excavated were founded directly on virgin soil.

## PALESTINE

**Jerusalem.**—In *PEQ.* July–October, 1944, Lt. Col. N. P. CLARKE has an article on the "Four North Walls of Jerusalem." His view on the course of these walls is illustrated by a map.

**Transjordan.**—In *PEQ.* July–October, 1944, M. E. KIRK gives an outline of the Ancient Cultural History of Transjordan.

## GREECE

### GENERAL AND MISCELLANEOUS

**Racial Analysis of Ancient Greeks.**—In *Am. J. Phys. Anthropol.* n.s. ii, 1944, pp. 329–376, J. LAWRENCE ANGEL shows that Greek variability 7% above normal reflects unusual heterogeneity, expressed in six artificial racial types validated by homogeneity, predictive value, and identifications with outside groups. These types are described, and their characteristics noted. The central trend is Alpinoid, and the genetic continuity is striking. The reduction of diversity through mixture accompanies the achieving of high civilization.

**Ancient Cephallenians.**—In *Am. J. Phys. Anthropol.* n.s. i, 1943, pp. 229–260, J. LAWRENCE ANGEL describes forty sub-Mycenaean skulls from this island. They are dominated by Basic White (especially "Megalithic") and Mediterranean types, with Mixed Alpine and Alpine minorities. Where they diverge from Mycenaean Greeks, they resemble Chalcolithic Sardinians, Sicilians, or Minoans, and contrast with Alpinoid Isthmian Greek contemporaries. They are variable, and three problems arise: (1) how far heterogeneity affects "racial types;" (2) how recessive gene combinations influence peculiarities and instability of insular populations; (3) what Trojan War activities explain 32% of male head wounds.

**Greek Teeth, Ancient and Modern.**—In *Human Biology* xvi, 1944, pp. 283–297, J. LAWRENCE ANGEL discusses the teeth of the ancient Greeks, and their comparison with the teeth of the modern Greek people, based on the skeletal finds from tomb excavations conducted in past years. He finds that the ancient Greeks had much better



teeth than modern civilized peoples, but enjoyed no immunity from dental disease. Teeth improved under full urban conditions of Classical times, with no marked deterioration until after 1300 A.D. The final deterioration is due to (1) early mediaeval soil exhaustion, (2) overcrowding, (3) changes in mouth bacteria and (4) excessive sugar (?).

**Aion.**—DORO LEVI makes a careful analysis of the place of Aion in ancient art and thought in *Hesperia* xiii, 1944, pp. 269-314. He describes the finding of a mosaic in the last campaign carried out at Antioch-on-the-Orontes in the summer of 1939. In the excavation of a house in the sector designated by 15-M a pavement came to light representing Aion and the Chronoi. On stylistic grounds the mosaic may be assigned to the middle of the third century after Christ. In the *emblema* four men are sitting at table, three forming a close group on the right, the fourth apart from the others on the left. The man at the far right is adult and melancholy, bearded, garlanded, and wrapped in a violet-gray mantle which covers most of his arms. The second figure is a young man, clad in a white-gray tunic, depicted with energetic features, and whose black hair is adorned with a wreath of slender sprigs. The third figure is a robust adolescent, showing his body in full nudity except for the left shoulder and arm. Of the fourth figure only the head with part of a shoulder is preserved. The face is that of a man of advanced age, with grayish moustache and flowing beard. The thick curls of hair are adorned by a luxuriant garland of leaves and blades of grass. His look is directed to the other figures. In the upper left corner of the panel the man's hand holds an arched object, part of a wheel. An object with a three-legged base stands on the ground before the central of the three figures on the right, which is undoubtedly an incense burner of a type used in Hellenistic and Roman times. Above the heads of the figures are inscriptions from right to left reading: Παρω(ι)χημένος, 'Ενεστώς, Μέλλων, Αἰών. Underneath, at the bottom of the couch in the middle is another inscription: Χρόνοι. In this mosaic at Antioch we find, therefore, a unique case both of a series of personifications and a kind of title that helps us to grasp the meaning of the allegory. The three seated figures on the same couch are included in the comprehensive conception of the "Chronoi." Aion, on the left, and a little apart, is Time in an absolute sense, in opposition to Chronos, that is Time in relation to something, and especially to human life. Levi

reviews carefully the various concepts of Aion in art and literature, the mythological, religious, and cosmogonic interpretations, as against the philosophical, and comes to the conclusion that on the mosaic at Antioch we have perhaps an illustration of the arguments of discussion in the intellectual classes of Antiochene society. The inscriptions of the mosaic seem to present to us the title of an argument for an evening's discussion, corresponding almost exactly to the title of the book of Plotinus' *Enneads*, Περὶ Αἰῶνος καὶ Χρόνων. In this period the mosaics representing at least single personifications of philosophical conceptions, if not complex ideas, multiply themselves in Antioch. These may reflect a philosophical movement in the learned and religious metropolis. They may be also a testimony to the conceptions passing from mouth to mouth which were used more or less by everybody, *excerpts* of philosophical speculation which together with religious and mystic ideas had passed over into popular philosophy. Perhaps this mosaic at Antioch does not aim exclusively to be either a figured representation of a philosophical speculation, or that of a current conception. Opposite to eternal Time, moving the ever-turning wheel are, seated and intent on a solemn religious function, the three periods of Time, past, present, and future, transient like man's life. So the artist would bestow on the figure of Aion the wheel, and would differentiate the other figures which nowhere else appear to us in ancient art, through the age and expression most suitable to the conceptions expressed by each of them. He groups these figures in a conventional banquet scene, to which the presence of the incense burner gives the obvious meaning of one of the ritual banquets particularly peculiar to the religious and mystic associations of his age. It is not improbable that to the very artistic representation of Aion a supernatural power was attributed, similar to that exerted by the very presence of the statuary image of a god within a house. Its presence may have been almost equivalent to one of those Φυλακτήρια which lower social classes and more superstitious people used to bury beneath the foundations of the house for its safeguard.

#### ARCHITECTURE

**Temples of Commodus, Corinth.**—R. L. SCRANTON publishes with illustrations in *Hesperia* xiii, 1944, pp. 315-348, two temples, known as H and J, situated in the middle of the row



of foundations across the West Terrace of the lower Corinthian Agora. They were almost entirely cleared in the spring of 1935, and described in the excavation report of that year, and the clearing completed in 1938. The remains of the two buildings, in situ, consist of concrete bedding for the walls, and the cores intended to support the heavy floors, both made of rubble concrete, and a few blocks of poros from the foundation courses along the western ends, and four blocks along the northern wall of Temple J. The front part of the foundations has been considerably cut up by mediaeval construction. The foundation masses cover an area approximately 16.50 m. square. A great number of architectural members belonging to the two structures were brought to light. J is evidently the earlier, as the poros foundation blocks of H on the side next J are smaller and more carelessly laid than on visible faces. J would have measured ca. 6.80 m. in width and ca. 12.00 m. in length excluding the steps, with a cella ca. 6.00 m. long and 5.50 m. wide, the pronaos being some 3.40 m. deep. While J offers less material for restoration, it may have been much like H: tetrastyle, Corinthian, with about ten steps and narrow paratids. Its principal difference would be the deep pronaos, flanked by antae, reaching to the second columnar position. Temple H would have measured ca. 7.60 m. in width and 12.00 m. in length, but the cella would appear to have been ca. 7.60 m. by 5.80 m. in its interior and the pronaos ca. 1.50 m. deep. The porch was tetrastyle, prostyle. The columns were smooth syenite shafts supporting marble Corinthian capitals, and resting on Attic-Ionic bases with plinths. In front there were thirteen steps, flanked by massive paratids, above a handsomely designed pediment and at the peak of the gable a fairly elaborate acroterion, apparently some sculptured figure or group. The inscriptions, containing the name and cursus of Commodus, assigned to these two temples indicate that J belongs to 184/185 A.D. and H to ca. 190 A.D. Apart from the interest in the inscriptions in dating the buildings so precisely, their principal importance lies in the fact that they would seem to be the only extant inscriptions in which Commodus gives himself the credit for the construction of a temple. Temple H seems to have been financed from the will of Cornelia Baebia, whose name was considerably subordinated to that of the emperor. As for the divinities for whom the temples were built, we may guess that Temple J was dedicated

to Poseidon, as it was erected on the remains of a fountain dedicated to Poseidon, demolished expressly for the purpose of building this temple. For the dedication of Temple H we have no clue.

#### SCULPTURE

**Hera the Sphinx.**—DOROTHY KENT HILL in *Hesperia* xiii, 1944, pp. 353-360, proposes a new interpretation of the familiar head of the cult statue of Hera from the temple at Olympia, so identified by excavators in 1870. Miss Hill believes, on the basis of Pausanias v, 17, 1-4, that all the statues mentioned in this passage were of gold and ivory, including the seated figure of Hera. This reading to date has not been accepted, because it seemed impossible and absurd to archaeologists, but the recent find of a cache at Delphi of chryselephantine statues, three as large as life, and one dating from the sixth century B.C., shows that such works did exist. Such early chryselephantine statues were made of wood with gold and ivory inlays and attachments, and were not very different from the cedar statues described by Pausanias (vi, 19, 8; 12) with gold inlays. Pausanias very significantly does not state that the Hera statue was of stone. Miss Hill suggests that the Hera head found at Olympia might belong to a seated sphinx, perhaps two meters tall, which had some place, not identified, in the Altis. Her reason for so thinking is based on the treatment of the left ear of the head, which projects at right angles, while a broken mass falls behind and below the ear. On the right side of the head, which is preserved as far as the left, there is no ear. This curious asymmetry may be explained by a head, such as a sphinx, who, quietly seated on her haunches, turns her head over her shoulder, so that you may see her face in front view at the same moment as you see her lioness' body in all its profile. The maker of the sphinx in this position must effect a transition between head and body, and this transition is likely to have some influence upon hair and ears. Then the side of the head turned toward the wing would let the hair fall forward in front of the wing, while those tresses on the other side of the head fall before the part which is the lioness' chest. In the New York sphinx, carved in such a pose, on the side toward the wing there is a protruding mass of hair against which the ear is projected and turned out, while on the other side the ear lies flat against the head. Though there is no parallel for the "Hera" face among the extant



sphinxes, yet just such a treatment of the hair can be imagined in the Hera head as in the Marion sphinx, where a primitive artist set out to make a sphinx with head turned over the left shoulder. There is no feature or attribute of the Olympia head which is incompatible with its interpretation as a sphinx. A stub at the base of the headdress on the left side might well be explained as a strut connecting the wing with the head, which would have advantageously strengthened a giant stone sphinx, and for which a parallel is found in a class of flat terracotta sphinxes of late Corinthian manufacture.

**Greek Statues in New York.**—The two statues published by GISELA M. A. RICHTER in this JOURNAL, xlviii, 1944, pp. 229–239, are again published by her, in abridged form, in *B.M.M.A.* n.s. iii, 1944, pp. 48–53 (6 figs.).

### VASES

**Melusa's Prize.**—In *B.M.M.A.* n.s. iii, 1944, pp. 110–112 (3 figs.) MARJORIE J. MILNE publishes a fine Attic black-figured eye-kylix, recently acquired by the Metropolitan Museum, and said to have been found at Taranto. It is virtually intact, and is decorated under the handles and between the obverse eyes with battle scenes, while between the reverse eyes a warrior is leading away a woman captive. The real interest of this vase is due to the graffito on the bottom, — Μελώσας ἡμὶ νικατήριον, ξάνωσα τὰς κόρας ἐνίκη, a prize won by Melusa in a wool-carding contest. This is the first indication we have that such contests were held; it is perhaps due to the supremacy of Tarentum in the manufacture of fine wool, or it may have had connection with some religious observance. The name Melusa suggests that the woman may have been a hetaira, but the author believes that this is probably not the case, as the fact that the vase was presumably buried with her “bespeaks ardor and pride in domestic pursuits.” The name may be a pet name, and the vase may “serve to give the reader some notion of the large, complex and fascinating subject of Greek names of persons.”

### INSCRIPTIONS

**Note on IG. I<sup>3</sup>, 945.**—A. E. RAUBITSCHKE corrects in *Hesperia* xiii, 1944, p. 352, the suggestion previously made that the stone carrying the epigram on the Athenians who fell at Potidaea was found in March, 1797, by Fauvel. A report by J. C. Hobhouse, who visited Greece in the com-

pany of Lord Byron indicates that it was found in 1802 in the region of the Platonic Academy. But in a letter of February, 1810, he describes it as found in excavations carried out by Lord Elgin in that portion of Athens called the “Cerameicus within the city.”

**Philinna Papyrus.**—CAMPBELL BONNER makes an emendation in *Hesperia* xiii, 1944, pp. 349–351, on the Philinna papyrus (published by Paul Maas in *JHS.* lxii, 1942, pp. 32–38). It concerns the last of a collection of charms written in hexameters. For line 15, following φεύγει δέ Bonner would read τε πᾶν followed by ὑπὸ πέτρῃς on the analogy of another magical text, the gold tablet of Vigna Codini. Philinna's spell is intended to drive away something harmful, such as a snake or scorpion hiding under a stone. Bonner reports suggestions from other scholars, and asks for further help in solving the meaning of this charm.

### NUMISMATICS

**Numismatic Comments.**—F. M. HEICHELHEIM writes two notes in *Hesperia* xiii, 1944, pp. 361–364. He believes that E. T. Newell's attribution of a group of tetradrachms of Seleucus II and Antiochus Hierax to the Troad can be confirmed and supplemented by two uncommon bronze coins in the Leake Collection of the Fitzwilliam Museum, Cambridge. Newell considers that his issue with the characteristic symbol of the owl emanated from Sigeum. Heichelheim comes to the conclusion that these two bronze coins with a similar owl countermark were issued from the Antiochia Cebren mint. Presumably a synoikismos of refugees from destroyed Sigeum (before 189 B.C.) with the inhabitants of refounded Antiochia Cebren took place under Antiochus II, or Seleucus III, or Antiochus Hierax, and that the Seleucid ruler took a personal interest in it.

Another bronze coin in the Leake Collection is important for Seleucid political history in giving evidence for a Seleucid pretender Antiochus in 151/150 B.C. The coin on the obverse shows the head of Dionysus right, wreathed with vine leaves. On the reverse appears a filleted thyrsus to the left, above and below ΒΑΣΙΛΙΩΣ ΑΝΤΙΟΧΟΥ. The monogram of the mint magistrate on this coin leads to the probable identification of the name as that of Antiochus VII Sidetes.

### ROMAN BRITAIN

**Roman Pottery near Lincoln.**—In *AJ.* xxiv, 1944, pp. 129–143, GRAHAM WEBSTER describes



two kilns and about 800 sherds discovered near Lincoln in 1942. This report amplifies the short account which appeared in *JRS.* xxxiii, 1943, p. 72 f. Over fifty percent of the output were mortars, about a hundred pieces bearing the name VOROLAS. In addition, the kilns produced flagons, painted ware, small beakers, and miscellaneous wares. The period of production seems to have been from A.D. 140 to 180.

**Bentley, Hants.**—*ILN.* February 17, 1945, p. 190, prints a photograph of an unusual discovery of ancient pottery near this place. The finds are mainly dark grey ware, provisionally assigned to the third century A.D.

**Anglo-Saxon Cemetery, Northants.**—In *AJ.* xxiv, 1944, pp. 100–128, E. T. LEEDS and R. J. C. ATKINSON describe the largest cemetery of the early Anglo-Saxon period so far found in Northamptonshire. In addition to traces of Romano-British occupation, three cremation and about fifty inhumation burials were found. The objects recovered form an unusually varied collection, including pieces distinctive of three cultural groups, the Anglian, Saxon and Celtic (or native) types. The most important of these finds are the brooches which include all the well-known types; among them nine examples of the swastika type. Also noteworthy are the bronze sleeve-clasps, a dress adjunct unknown in S. E. England and Wessex, but particularly common in the Cambridge region.

#### EARLY CHRISTIAN AND BYZANTINE

**Doors of Santa Sabina.**—In *The Art Bulletin* xxvi, 1944, pp. 207–231, ERNST H. KANTOROWICZ presents a new interpretation of the scenes in two of the so-called “enigmatic” or “mysterious” carved wooden panels in the doors of Santa Sabina on the Aventine Hill in Rome. “The wood carvings in the various compartments of the doors have been convincingly ascribed to an Italo-Gallic school which flourished in Northern Italy during the fourth and fifth centuries. The date of the doors, which represent after those of San Ambrogio in Milan the earliest monument of its kind, is ca. 430 A.D. The carvings are unique in many respects, or even without parallel.” One in which two groups of men, arranged in two superimposed registers, acclaim an emperor and an angel who stand before a building or a city gate, is interpreted on the basis of classical models as an *Adventus*—“Behold I send my angel and he shall prepare the way before my face” (*Malachi* iii,

1–2). The panel thus represents “the sudden *Adventus* of the Messianic world-ruler and of his angelic forerunner at the gate of the Temple.” The other panel, which apparently represents two figures, Peter and Paul (with Mary standing between them), holding up a peculiar object, a sort of a wreath with a handle, toward the figure of Christ in glory, is also an *Adventus*—that of the Lord before the Day of Judgment. A glance at the scene upside down reveals without any doubt that the “wreath” is a cross with a crown of light, which was to be the forerunner of the Lord and which the Apostles are not holding up but are receiving.

**Mérida.**—Excavations have been resumed. The most important recent discovery is a Christian church of the Roman period, which is likely to prove of great significance in studying the origins of Christianity in Spain (*College Art Journal* iv, p. 54).

**The Ruthwell Cross.**—In *The Art Bulletin* xxvi, 1944, pp. 232–245, MEYER SCHAPIRO discusses “the Religious Meaning of the Ruthwell Cross.” Baldwin Brown (*The Arts in Early England*) had concluded that the scenes symbolized the triumph of the cross. Schapiro points out, however, that the dominant scene is that representing Christ and the beasts. This and the smaller panels are allegorical representations of asceticism and eremitism, which would have particular meaning to the Celtic people. “The Northumbrian church in its beginnings was a monastic movement led by abbots and monks inspired by the example of the desert fathers, and coinciding with a wave of most intense asceticism in the Celtic world. . . . The Cross is Anglian and classic in its forms mainly Celtic in its religious content.”

**Umayyad Architecture.**—The capitals of the palace of the Caliph Hisham (A.D. 724–48) at Kh. Mafjar near Jericho are subjected to a thorough analysis by R. W. HAMILTON in *QDAP.* xi, 1944, pp. 47–66. The normal composition is in four horizontal registers, consisting of two wreaths of eight acanthus leaves, surmounted by volutes which support an abacus. One example has three tiers of leaves. The lower order of the arcades flanking the main gate was supported by piers of four clustered columns carrying compound capitals quite removed from conventional types. A new feature of the foliage is the club-like knob which terminates the central rib of each leaf (cf. fig. 16). The volutes are single and separated by a six- or eight-petalled rosette. The capitals of the



upper order of the gateway-arcades resemble those of the central court. The pattern of the foliage is an imitation of fifth century Christian work. New features include (1) the insertion of a pair of half-palmettes between the volutes; (2) the decoration of the sides of the abacus, a characteristic of the nave capitals of the Aqsa Mosque and of the Golden Gate of the Haram esh-Sherif. In the capitals from the mosque, forecourt and pool the arrangement of the composition in horizontal zones is even more marked. The foliage is divided into two quite independent registers, while the volutes, instead of appearing to spring from somewhere behind the upper leaves, are framed between two plain horizontal borders, giving them the appearance of being a mere ornament on the side of the abacus. The wind-swept appearance of some of the foliage is based on Syrian or Egyptian prototypes. There are a few capitals which do not conform to any of the above mentioned types.

**Illustrations for Chronicles.**—Under the title "Illustration for the Chronicles of Sozomenos, Theodoret and Malalas," KURT WEITZMANN presents, in *Byzantion* xvi, 1942-1943, pp. 87-134, a study the aim of which is to prove the former existence of illustrated manuscripts of the three above-named historians. His method consists essentially in a closer interpretation than any hitherto attempted of one of the best known Byzantine manuscripts, the Gregory of Nazianzus (Paris, *cod. gr. 510*), into which a few miniatures from illustrated chronicles now lost are conjectured to have been copied or adapted. The migration of miniatures from one text into another, he points out, is a widespread custom in mediaeval book illumination, the full extent of which can be demonstrated particularly clearly in the historical scenes which appear in *Paris 510*, a manuscript written between 880-886 for Basil I in Constantinople. This borrowing was not necessarily done by the immediate painter of the Paris copy, but more likely by the illuminator of a model or even the archetype of the picture recension to which the Paris manuscript belongs. The criteria to determine whether a miniature was made for the Gregory text or borrowed from another illustrated manuscript are: first, the degree of correspondence between the picture and the text to which it is now attached. If the correspondence is close, we may assume that the miniature was made specifically for the Gregory; if not, we can surmise that the illustration was taken over from a manuscript

where it had originated in conjunction with a fuller describing text. Secondly, evidence of this sort can be greatly strengthened if the textual allusion be supplemented by a pictorial connection, i.e., by a correspondence in iconography of the scenes represented. The body of Weitzmann's paper is concerned exclusively with a group of miniatures of historical subject matter for which the Gregory text does not give a sufficient explanation.

In the Paris codex the homily entitled *Contra Arianos et de seipso* is preceded by a miniature in three stripes, each of which illustrates a very specific episode from the history of the persecution of the Orthodox by the Arians. In the first appears a ship with six passengers, among whom a bishop is clearly distinguished by his pallium. The author conjectures that this must represent Athanasius, five times driven into exile, the specific occasion being his third flight in the year 356 as it is reported by Theodoret. The second scene depicts the firing of several churches, the general context of the Gregory homily implying the destruction by the Arians of certain specific houses of worship. Here Weitzmann thinks that the miniature shows the destruction of the churches of Miletus by the governor of Caria on orders from Julian the Apostate and, since this story is told by Sozomenos only, concludes that this chronicle also existed with illustrations. The third scene deals with the martyrdom of an old man who is suffering a very specific kind of torture. The episode which seemingly best fits this miniature is recounted by Sozomenos and tells of the martyrdom of Marcus, bishop of Arethusa, an event which, like the burning of the churches of Miletus, took place in the time of Julian. The author thus concludes that the first scene of the miniatures comes from Theodoret and the second and third from Sozomenos. Although he had hoped to discover a single source for all three scenes, an analysis of the whole cycle of the Paris Gregory indicates that, as a rule, at least two different models and often more were used by the painter in order to fill the stripes of a single page.

Each of Gregory's two homilies *Invectiva contra Julianum* bears as frontispiece a miniature in three ranges with historical scenes. The upper stripe of the miniature preceding the First Invective shows the Emperor Julian following a sorcerer who leads him by the hand into a cave where a winged demon, in front of a group of subordinate figures, seems to address the newcomers; at the



left is a two-storied building and at the right a sarcophagus on a hilltop. From a study of the possible sources, the author concludes that this miniature, which he assumes to have originated in Sozomenos, may perhaps have passed through an illustrated Theodoret as an intermediate stage before it migrated into the homily. The second scene shows Julian, with a companion and two bodyguards, watching the sacrifice of a bull while another bull lies burning before a group of three idols. The source of this episode is conjectured to be either Socrates or Sozomenos. In the third scene Julian appears enthroned, pressing against his left side a small golden idol while with his right hand he offers a plate of gold coins to a group of military officers; other coins are in a jewelled box at his side and before him appears a brazier for incense. At the left is a building, perhaps the imperial palace, with two of the bodyguard in front of it. The source for this scene may have been either Sozomenos or Theodoret, since the differences between the pertinent passages in each are too slight to be decisive. Thus all three scenes illustrating the First Invektive can be derived from Sozomenos: the first scene with the demon certainly, the second with the sacrifice of the bulls from either Sozomenos or Socrates, while for the third neither the homily itself nor the chronicle of Theodoret can be entirely excluded as another possibility, although Sozomenos seems slightly better as the ultimate source.

The three scenes which precede the second *Invektiva contra Julianum* deal with the emperor's death on his expedition against the Persians. In the first he appears mounted and clad in splendid armor. Riding at the head of his cavalry, he approaches a bridge which spans a river and leads to the gate of a walled city, outside which stand Persian troops armed with lances and square shields. The city is Ctesiphon and the river the Tigris. Since this scene apparently agrees more closely with the description by Sozomenos than it does with that of the homily, it is safe to assume that the miniature probably originated in the chronicle. In the second scene two nimbed bishops and a deacon approach an altar; they are followed by a group of monks and by another group, probably novices. The altar stands before a church and the groups are enclosed by a crenellated wall with towers, probably intended to represent a monastery. In the second *Invektiva* no passage seems related to this picture, and the same holds true for Theodoret's chronicle, since the leading bishop is

identified as Basil by an inscription in the miniature. This and other incongruities can best be explained by assuming a development in which the composition originated as an illustration of Theodoret's passage of the vision of a monk, Julianos, in which the latter sees the death of the emperor. It was then taken over into the chronicle of Malalas and changed by substituting Basil for Julianos. From this the miniature migrated into the Gregory homily and was changed to adjust it to its present context by inserting Gregory himself as a companion of Basil. The third and last scene depicts the death of the emperor who is hurled from his horse by the lance of a pursuing mounted adversary. The latter is nimbed and identified by an inscription as St. Mercurius, of whom, however, the pertinent text in the homily makes no mention. A study of the historical sources indicates that here again we have to do with an instance of double migration, since the scene is best explained by assuming that the miniature was invented for the chronicle of Sozomenos, was then taken over into the Malalas text where the inscription naming Mercurius was added, and was finally transmitted to the Gregory homily.

Of the various scenes in four ranges which precede the homily entitled *Oratio funebris in laudem Basilii Magni*, two episodes seem to contain more details than the Gregory text can account for. Thus in the right half of the first range there appear before a walled city two nimbed figures with an older man between them. The latter, by his nude breast, himation and scroll is sufficiently characterized as a learned pagan. Although this scene was certainly not composed for the Gregory text, it is impossible to decide whether Socrates or Sozomenos should be accepted as its source. The second episode, directly below that just mentioned, illustrates the death of the son of the emperor Valens and is not explained by the text of the homily. Here, however, the report by Theodoret seems satisfactorily to account for certain peculiar features of the scene and may hence be accepted as its source.

The upper stripe of two ranges which form a frontispiece to the homily entitled *Supremum vale, coram centum quinquaginta episcopis* shows three bishops, their leader, presumably Gregory, facing the emperor Theodosius, who stretches forth his right arm toward him. The emperor has just risen from a richly ornamented throne and is attended by two bodyguards. Neither the inscription on the miniature nor the text of the homily



gives the slightest clue to this obviously dramatic meeting between Gregory and the emperor, and the chronicles likewise fail to mention any such meeting. However, at the beginning of the same oecumenical council which induced Gregory to abdicate, a famous reception of bishops did take place at the imperial palace; but for this our only source, Theodore, names Meletius as the bishop who was dramatically recognized by the emperor. Faced by this dilemma, Weitzmann assumes a substitution of Basil for Meletius and supposes that the miniature was originally invented to illustrate the recognition of Meletius by the emperor. The Gregory painter then took this composition over into the homily with no essential changes.

The author summarizes his findings by pointing out that the Gregory manuscript illustrates twelve episodes taken over from the chronicles of Sozomenos, Theodore and Malalas. The works of the first two were written about the middle of the fifth century, that of Malalas one century later, but whether these texts were illustrated contemporaneously or at some later date is not known. However, since the Gregory manuscript was made for Basil I and is obviously a product of the imperial scriptorium at Constantinople, it seems probable that the illustrated chronicles used by the copyist as models were actually in the imperial library and were perhaps themselves likewise written and illuminated in the imperial scriptorium. As to the special branch of secular book illumination to which these chronicles belonged we know very little. Only one illustrated Greek chronicle has come down to us, the history of Johannes Scylitzes, preserved in a fourteenth century manuscript which contains more than four hundred miniatures. Comprising the period from 811 to 1079, it was written in the second half of the eleventh century and illustrated not long thereafter. The archetypes of Sozomenos, Theodore and Malalas obviously belonged to this same late type, with miniatures the full width of the page as in the case of the late Scylitzes manuscript. In the light of the preserved chronicles the three lost works reconstructed from scattered miniatures in the Gregory manuscript thus help to bridge the gap between the rather early papyrus chronicles on the one hand and the late Byzantine and Slavonic copies on the other.

**Greek Liturgical Embroideries.**—GERTRUDE TOWNSEND publishes, in *BMFA*, xlii, 1944, pp. 73-81 (12 figs.), a group of five examples of em-

broidery made for the Greek Orthodox Church, and received by the Museum of Fine Arts in Boston from the Elizabeth Day McCormick Collection. The first is an *epitaphion*, on which the body of Christ, with mourners, is represented. The oldest surviving example of this type, now in the Byzantine Museum in Athens, is dated in the fourteenth century. Others of almost as early a date are in the monastery of Putna in Romania, and in Moscow, the latter dated by an inscription in 1396. The example in Boston is tentatively dated in the last half of the fifteenth century, owing to its resemblance to another *epitaphion* at Putna, dated in 1490. A stole, with representations of the Virgin and nine saints, is probably of the second half of the fifteenth century. It is worked on linen in solid gold and silver thread, couched with silk of green and red. It bears a close resemblance to a stole at Putna, dated in 1469, which has the same saints, with the addition of two others, Demetrius and George, not shown in the Boston stole. The saints wear the traditional vestments of the Greek Church. Another stole is dated in the sixteenth century, as it is made of red silk damask, which appears to be Italian of that period. It has embroidered representations of the Virgin and five saints, with Christ and two angels. Each saint's name is inscribed in a much abbreviated form. A fourth piece is an *epigonation*, worn above the knee in ecclesiastical vestments, on which Christ is shown washing the feet of His disciples. A date in the seventeenth century is suggested. To the same period belongs a pair of ecclesiastical cuffs (*epimanikia*), the publication of which concludes the article. They show the two figures of the Annunciation in gold and silver, on green velvet.

#### MEDIAEVAL

**Province of Catalonia.**—From Spain comes the report that restoration of the Romanesque churches of Sans Pons de Corbera (where remains of ancient frescoes have been found), Castellfollit de Riubregós and Santo Cristo de Mediona has been undertaken by the Servicio de Protección de Monumentos Históricos of Barcelona. The Palace of the Kings of Aragon in Villafranca del Panades is being converted into a museum. In Tarrasa the ancient castle on the site of the Roman city of Egara is to be restored. The Romanesque monasteries of San Cugat del Valles and San Pedro de Roda are likewise to be repaired and preserved (*College Art Journal* iv, pp. 52-53).



**Statue of the Virgin.**—WILLIAM H. FORSYTH publishes, in *BMMA* n.s. iii, 1944, pp. 84–88 (7 figs.), a statue of the Virgin acquired by the Metropolitan Museum in the Blumenthal bequest. It is clearly French, and of the first quarter of the fourteenth century. Although its actual provenance is unknown, it is established, by comparison with other known examples, that it is by a Norman sculptor. The stone used bears a close resemblance to that of Caen. Closest to the Blumenthal statue is one at Limeuil in the Dordogne, which the writer believes was either imported from Normandy, or carved under strong Norman influence. The Child is represented as holding in one hand the loose end of his mother's girdle, perhaps to symbolize the mystical marriage of Mary and Christ.

**German Primitive.**—GEORG SWARZENSKI publishes, in *BMFA* xlii, 1944, pp. 42–50 (7 figs.), a very interesting painting of the Coronation of the Virgin, recently acquired by the Museum of Fine Arts in Boston. It had previously been in a private collection in Boston, but its ultimate provenance is unknown. It is painted on a pine panel, and was apparently part of an altarpiece. By its style it can be dated about 1400. It is linked with German painting, but its correct localization requires careful study. It reveals features traceable to French and Italian sources, which are developed by the writer; but it cannot be immediately associated with any hitherto recognized school, and its individuality is evident. Attention is arrested, not by details, but by the artistic nature of the work as a whole, with its emphasis on plastic effects. It is obviously in contrast to the achievements of the court and aristocratic currents in contemporary art, being seemingly unsophisticated in character, and showing the firm expression of a distinct artistic spirit, which gives evidence of a genuine popular feeling. The whole technique of the painting is described at some length, but it is sufficient to say that the color treatment is typical of the period of 1400. There is a significant predilection for deep and heavy color, but the general effect, due to the spontaneous method of painting, is "colorful, gay, and bright." Suggestions in the work recall early tapestries, especially the groups localized in and around Basel, while some of the architectural painting recalls work done in Westphalia, Saxony, and the Hanseatic League. Other comparable architectural details occur in a group of panels connected tentatively with Erfurt. This emphasis on architectural details is found also in

the Baltic area, but these paintings have not the spontaneous spirit of the Boston picture, which the writer believes has a more Southern character, especially in comparison with works of the Alpine region. It is possible that the Boston painting may have come from the region of Basel or Constance, but any convincing link is missing, and for its origin we must probably look to the Austrian Alps. The spirit of the painting of this area can be best defined by the large amount of frescoes and stained glass of this period extant, and the structure of the Boston panel can be best understood when associated with this stained glass work. The decisive elements suggest the Tyrol, particularly the southern district. The panel-painting of this region, closest to the Coronation in Boston is a Trinity in the convent gallery at Neustift at Brixen, dated about 1418, which, though by a different hand, has many things in common with the Boston Coronation. "The Boston picture may well indicate a preceding stage of painting in south Tyrol, and its relation with Brixen is likely." The rest of the article deals with the iconography of the Coronation of the Virgin. The Boston example appears to be the prototype of the composition accepted by the great northern masters of the fifteenth and sixteenth centuries. In the earlier representations Christ and the Virgin are seated side by side; here the Virgin kneels between God the Father and God the Son, while above her is the Dove of the Holy Spirit. This conception does not exist in Italy, and in the pre-van Eyck period is found only in Germany, Central Europe, and England. It would appear to have originated in the Tyrol, then gone into Austria, thence north, not reaching France till ca. 1453. There is, however, a drawing in the Louvre, almost contemporary with the Boston Coronation, which shows that this treatment of the subject was known in France early in the fifteenth century, but whereas in the Tyrolese treatment the emphasis is on the Virgin, in the Paris drawing it is on the Trinity. In conclusion, the writer says that this treatment of the subject rapidly became popular in the Tyrol, and, while "rare and almost unique in the period of our picture, inspired the outstanding conceptions of the great Tyrolese masters in the second half of the fifteenth century."

**Tabernacle by Gregorio de Cecco.**—In *BMFA* xlii, 1944, pp. 53–56 (3 figs.) G. H. EDGELL confirms an attribution made by him in 1932 in his *History of Sienese Painting*. Up to that time, Gregorio had been known only by his Madonna



dell'Umltà in the Opera del Duomo at Siena. Since the book was written, this tabernacle in Boston has been thoroughly cleaned, and a signature of "Taddeo Bartoli" has been proved to be a forgery. A comparison with the Madonna at Siena amply confirms Edgell's attribution. Gregorio was the pupil and adopted son of Taddeo di Bartolo, but although, therefore, later in date than Taddeo, he is more mediaeval in feeling. Gregorio's career is set between 1389 and 1423.

**Paintings by Sassetta.**—HARRY B. WEHLE publishes, in *BMAA*, n.s. iii, 1944, pp. 96-97 (2 figs., and cover illustration in colors) two paintings by Sassetta (1392?-1450). The first, in the Metropolitan Museum, depicts the Journey of the Magi; the second, in the Chigi-Saraceni collection at Siena, the Adoration of the Magi. These two panels are "parts of a single large painting which some vandal has cut apart." Sassetta was virtually forgotten until James Jackson Jarves brought two examples of his work to America, and published them as by his hand. Since then, Douglas, Berenson, Pope-Hennessy and others have made adequate and scholarly studies of his work.

### RENAISSANCE

**Campo Santo, Pisa.**—*ILN*, February 17, 1945, p. 191, prints a page of photographs showing the damage done to this monument during the campaign in Italy. Detailed pictures show what befell various of the frescoes; those by Benozzo Gozzoli suffered the greatest harm. A temporary penthouse roof has been constructed over the cloisters, to preserve what remains from the effects of weather.

**Holkham Venus by Tintoretto.**—In *The Art Bulletin* xxvi, 1944, pp. 266-270, E. TIETZ-CONRAT calls attention to the description by Joachim von Sandart of a painting acquired by him in Venice about 1630—a recumbent Venus by "'Jacopo Tintoretto the Younger,' whom we may with certainty identify with Domenico, the head of the shop in the second generation." The description fits exactly the Holkham "Venus with the Lute Player," in the Metropolitan Museum, and versions in Cambridge and Dresden, which have been attributed to Titian. The author then produces stylistic evidence to substantiate the historical. The new attribution vastly improves Domenico Tintoretto's artistic reputation.

**Early Work of Claude Lorrain.**—In *BMFA*, xlii, 1944, pp. 67-72 (8 figs.) W. G. CONSTABLE

reveals that important discoveries have been made regarding the early work of this artist in the recent acquisition of two of his paintings by American museums. In 1941 the Detroit Institute of Arts received the gift of a landscape, *Evening*, while in 1944 the Museum of Fine Arts in Boston purchased a picture, *The Mill*, both works signed with the date 1631, eight years earlier than the earliest dated example known hitherto. This is contemporaneous with a painting on copper in the Louvre, *The Forcing of the Pass of Susa in 1629*, now believed to have been signed as painted in the same year, which brings with it a pendant picture on copper, unsigned, depicting the *Siege of La Rochelle in 1628*. The influence in these early works is that of Elsheimer and Brill. While Claude often seems to have entrusted to others the painting of the figures in his pictures, it is certain that those in the Boston painting are his own. His work in the field of drawings and etchings is also discussed, and it is shown that the Boston painting is derived from no. 22 in the drawings in his *Liber Veritatis*.

**Rembrandt's "Polish Rider."**—In *The Art Bulletin* xxvi, 1944, pp. 224-265, JULIUS S. HELD discusses Rembrandt's so-called "Polish Rider," now in the Frick Collection. The author gives a history of the painting, which he demonstrates quite convincingly is not a portrait and not necessarily a "Polish" rider. Rembrandt was probably inspired by a series of etchings designed by his Italian acquaintance Stefano della Bella, which depicted "foreign" riders, and by the delightful idea which undoubtedly occurred to him of giving life to the equestrian skeleton he had sketched in the anatomical theater at Leyden. In the end, the artist may have intended his picture to be "an apotheosis of those soldiers of Eastern Europe who were still carrying on the traditions and ideals of Christian knighthood. . . . Rembrandt may have called him by a definite name. There is little hope that we will ever know it. But it is possible to see that this figure of a young warrior . . . was to Rembrandt a figure of youth, a symbol all the more beautiful and moving for being derived, at least in part, in a creative process which is beyond our power of analysis, from the bare bones of a rigid skeleton."

### AMERICA

**Early Man in America.**—In *Geog. Rev.* xxxiv, 1944, pp. 529-573 (3 figs.) CARL O. SAUER gives a long geographical sketch of early man in



America. This closely written article is prefaced by a page exposing the subject, and the method to be employed in its treatment. The headings indicate the course of the article. Man arrived in America during the Ice Age—the Folsom finds, the validity of which was established in 1927, appear to be contemporary with that age. A long section then deals with the nature of glacial climates, and its relation to archaeology, much neglected by archaeologists. If, as is now almost universally admitted, man came to America across the Bering Strait, the corridor by which he reached the plains of the United States from Alaska, and the times in which it was possible, are uncertain, and depend on the determination of glacial successions in Western Canada. The first known arrivals (Folsom and Yuma man) were examples of hunting cultures, and the writer suggests that an earlier date than those usually given for these remains is not only not impossible, but highly probable. Evidence shows that while the Yuma culture survived Folsom, it went back as far as Folsom, and may antedate Solutrean in Europe, to which it is far superior. We must also consider pre-Folsom finds reported in New Mexico, Southern California and Texas, and the reported existence of non-hunting cultures to the south and east of the hunters. The best known of these are listed. The existence of Pleistocene man in America "can no longer be denied." The mammals of the Pleistocene era are next discussed—most of them, like man, migrating from the Old World. At that time "our plains and valleys were well populated with the most diverse big-game fauna in their history." The remains of these animals are found in association with man, for whom they served as food. The ancient hunters and the ancient game mammals seem to have left the scene together. The animals may have died out as a result of climatic change, due to decreasing precipitation, and also to hunting by man. This extinction, however, was not sudden, although Folsom and Yuma man were expert hunters, who attained an astonishing perfection in the manufacture of blades and points in stone, used for javelins or lances, for hurling and thrusting. These hunters must have worked in organized bands, and the use of fire to frighten and demoralize game is indicated. In such fire drives the kills often far exceeded the needs of the hunters (cf. the Lipscomb Bison Quarry). This widespread use of fire provides an apparently adequate explanation for the extinction of large mammals in post-

Pleistocene times, and before the assuredly Indian peoples appear.

The matter of the expansion of grasslands and its effect on early man is then taken up. The different types of grasslands are mentioned and described. The vast geographic extent of grasses is a late development in earth history, beginning to appear outside the tropics in Tertiary times, and a discussion is given as to the creation of the Great Plains and the introduction of grasses and grains to this area. A section is then devoted to Pleistocene Vegetation of the Interior Plains, and the conclusion is reached that little support can be given to a thesis of wide grasslands before Recent times. This cannot be altogether due to a spurt in the evolution of the grasses themselves, nor to the presence of herbivorous animals as disseminators of seeds. Man must have had a share in this phenomenon, and the belief is given that the prairies were caused by fires, which removed the elements necessary for long-lived perennials, such as trees and shrubs. The matter of natural fires as opposed to burning by man is next considered, and while the possibility of fires from lightning is admitted, it is stated that from the plains no documentation exists of such fires, but that the fire drives of hunting man could account for them in great measure.

The routes of dispersal of man in America are then discussed, with the aid of a map showing the main route from Alaska, extending well into the center of South America, with branches east, west, and south. There was no drift of migration by way of the Pacific coast, or along the shore. It is inferred that this area was the last important part of the New World to be occupied by man. We do not know yet whether the earliest corridor connecting Alaska with the interior United States lay east or west of the Rocky Mountains, as archaeological investigation to solve this problem is still to be done. From southern Canada to New Mexico along the eastern base of the Rockies there was "a long zone of early colonization" which was the central axis from which the dispersal of early man took place. The different sites uncovered are listed. The spread to the Atlantic coast was through the tributaries of the Mississippi, as is shown by finds in Minnesota, Ontario, and Wisconsin, where there was undoubtedly a "vigorous and varied" vegetation in the immediate post-glacial period. Going down the Mississippi, the migrations passed up the Ohio valley, and into the deep South. "From earliest times—the St.



Louis area—was an aboriginal crossroads." The South was also reached from the southern Rockies and Great Plains, and from this area northern Mexico was also penetrated. The time of the entry into South America is still in doubt, but the writer believes it took place in the late glacial age, when climatic conditions in the tropics were different from those of today. In South America routes extended eastward towards the Orinoco, and south within the Andes into Bolivia, where branch routes led eastward into Brazil, and south to Argentina and Chile. In both North and South America the hospitable Atlantic coast was only reached by side routes from the west.

A large section of the article is then devoted to a discussion of "Age Inferences from Distribution of Traits." Pointing out that at least 10,000 years, or at most 15,000, have elapsed since the Folsom finds, the writer maintains that it is as improper to speak of the early arrivals as Mongoloids or Indians as it would be to call the contemporaneous Cro-Magnons Europeans. The ancient people were long headed, in contrast with the modern Indians. With the possible exception of the Red Ocher people this is true from Cochise I to the Hopewell and Basket-Maker folk. Some of these long-heads were short in stature with low-domed skulls, others short with high domes, still others long-limbed and tall. The conclusions of Denniker, Ripley, Griffith Taylor, Dixon, and others, are summarized, and the conclusions show an extremely early dolichocephalic strain, about a core of later comers, generally brachycephals. The map of Imbelloni, showing racial distributions, is published to show the present beliefs on this subject. The oldest and most primitive element are the Fuegids, who are believed to be the nearly extinct descendants of a pre-Folsom migration; next in time are the Laguids (also perhaps pre-Folsom) whose descendants are found principally in Brazil, with some remnants in Lower California. The Basket-Makers may have belonged with this group. Other long-headed stocks are the Pampids in South, Planids in North America, and Sonorids in Central America. They are all of exceptionally high stature, particularly in Patagonia. The Amazonids, as their name implies, inhabit the Amazon area, and extend to the North coast of South America, and the West Indies. They conserve dolichoid traits, and "may be a blurred lot of descendants of earlier immigrants." These traits, if valid, suggest a succession of pre-Mongoloid, pre-Indian settlements in the New World. The

Indian race, "if it must be thought of as such" is something that has been in process of formation through gradual mixing of stocks and lengthening separations from the Old World. The process of Indianization is what needs attention, and anthropology and anthropometry must be combined with the study of genetics and blood groups. A long exposition is given of the different blood groups to be found today, and here, too, we reach the conclusion of a long series of migrations. The first migrants were apparently of blood-group B, then came a migration of people of blood-group A, while the final migrants were of group O, which is the dominant blood-group today.

A section is then given to the Roots of Aboriginal Cultures, in which the conclusion is reached that "a diversity of primordial culture complexes should have been carried into the New World" by successive waves of colonists, which may be traced by social organization, religious beliefs, and language. A section is therefore given to language distributions. It is of importance to note that, in contrast with the Old World, there are many apparently unrelated languages, indicating great diversity, and offering arguments for the antiquity of separation of New World populations, not only from the Old World, but from each other. This linguistic picture, therefore, also points to a long series of waves of migration. These language distributions are especially interesting in South America, and are elaborated in the article. There is no such situation in North America, except on the Pacific Coast.

The final section deals with material culture. Here, too, South America "harbors more primitiveness" than North America, but in both continents the simplest conditions are found in the end zones of the migration routes, or in unattractive intermediate areas. These locations are listed, and their weapons and utensils enumerated. It is not unreasonable to suppose that we have in these modern primitives the descendants of the first immigrants who came before the Folsom hunters. (Incidentally, it is now suggested that the Yuma culture may have extended into north-central Chile, as superb leaf blades of this type have been discovered in that region). There is an impressive development of culture to be accounted for between the early hunters and the early farmers, and it is suggested that the Folsom and Yuma folk may have merged with later hunters who introduced bows and arrows, and the use of hunting dogs. "The far corners of the New World are



jumbled but real museums of the remote antiquity of man."

**Prehistoric Petroglyph.**—M. R. H(ARRINGTON) publishes a photograph, in *The Masterkey* xviii, 1944, p. 196, with comment, of a mysterious "message" of punctate type, carved on a cliff in the Muddy River canyon in southern Nevada, near the noted "Lost City," and other prehistoric ruins. It is estimated that these petroglyphs may be twelve to fifteen centuries old, and their meaning is quite obscure.

**Oregon Atlatls.**—In *The Masterkey* xviii, 1944, pp. 169-179 (11 figs.) L. S. CRESSMAN reports the recent discovery of the missing half of a Plush Cave atlatl, which makes it possible to describe the complete weapon. Two types have been previously reported from south-central Oregon caves, one from Roaring Springs Cave (two specimens) and one from Plush Cave, this latter being discovered in 1938, when only half of it was found. The geological structure of the cave is described at some length, and the evidence obtained in 1938 pointed to the cave having been plundered, although a number of artifacts were found, which are described at the end of the article. In June 1943 Mr. and Mrs. Ralph E. Patrick searched a cave near Plush, and found part of an atlatl. This cave proved to have been the very one excavated in 1938. The writer at once requested them to send their specimens to him for examination, and found that the part of an atlatl found by them was the missing part of the specimen found in 1938. The Patricks gave the bulk of their finds to the Oregon State Museum of Anthropology at the University of Oregon, thus enabling the weapon to be reconstructed. It is similar to the general Basketmaker type, but not nearly so well developed. It is believed that it is probably earlier than Basketmaker. A good description of the weapon is given. Other features of the atlatl complex to be found were a butt end of an atlatl projectile, and a bone bunt. Eleven fragments of typical Catlow Twine basketry were also found, a number of which may be from the same basket, and including several specimens of coarse containers, probably used for storage. The method by which these baskets were made is thoroughly treated, with diagrams. The conditions of the cave did not permit any worthwhile observations on stratigraphic conditions.

**Aboriginal South American Culture.**—JOHN M. COOPER publishes in the *Smithsonian Report*, 1943, pp. 429-461 (4 pls., 2 maps), a paper dealing

with *Areal and Temporal Aspects of Aboriginal South American Culture*. The cultures are largely determined by the physical geography of the continent—in the Andean region occurred the highly developed Sierral culture, which includes the important pre-Columbian civilization of Peru; in the forested lowlands of the Orinoco and Amazon watersheds is found what the writer calls the Silval culture; while the third division, bounded on the west by the southern Andes, on the northwest by the Amazonian rain forest, and on the north- and southeast by the Atlantic, and containing about one-half of the area of South America, the open country belt, was the region of the Marginal culture. These three cultures are described, both as to areal distribution and as to diffusion and sequence, both before and since ca. 1000 A.D. The question of Old World influence is briefly mentioned, a summary is given of the data presented, and a "tentative prehistorical reconstruction" is attempted. The paper concludes with a comprehensive bibliography.

**Chiriqui Pottery.**—The Southwest Museum has recently acquired a notable collection of pottery and other objects from the Chiriqui region of Panama. M. R. H(ARRINGTON) describes it in *The Masterkey* xviii, 1944, pp. 142-143 (fig.). The collection includes 77 pottery vessels, either complete or restorable, 13 grinding slabs with 8 grinding stones, 22 stone hatchet or adze blades, and other miscellaneous objects. Some of the vases have polychrome or incised decorations, but in most cases the decoration consists of animal figures moulded in the round, and applied to the vessel while still plastic. These objects were given to the Museum by Mr. J. W. Browne, who had acquired them by personal excavation of ancient graves in the Province of Chiriqui.

**Asiatic Origin of Huichol Still.**—In *Geog. Rev.* xxxiv, 1944, pp. 418-427 (9 figs.) HENRY J. BRUMMAN of the Smithsonian Institution (for a sketch of the writer, see *ibid.* p. 484) discusses the distilling apparatus used by the Huichol Indians of west-central Mexico. There is no direct evidence to support the theory that distilled beverages were known in pre-Columbian America, unless this isolated example is to be regarded as an aboriginal invention; and what little we do know of Huichol prehistory does not suggest that this tribe adopted a sedentary mode of life until the time of the Spanish conquest. The Spaniards probably introduced various types of stills into Mexico, but with external receivers—in this apparatus the



receiver is internal, a type not at that time found in Europe. The writer, following the researches of Carl Lumholtz, made a trip to the Huichol country to verify Lumholtz's data, and obtain additional information. He describes the materials used by the Huichol in distilling liquor, its preparation for distillation, and the mechanics of the still. The origin of the still is definitely suggested by the use of the word *tuba* for the fermented liquor ready for distillation. This word is also found in the Philippines, and there is abundant evidence to prove that the manufacture of coconut wine and brandy was introduced into the Colima area of Mexico by Filipino seamen in the sixteenth century. It has been shown that stills with internal receivers were, and still are, used in the Philippines. Diagrams of these stills are given, which probably originated in Mongolia. Thus it seems evident that the Huichol still was not an independent creation, but was adapted from Filipino patterns.

#### FAR EAST

**T'ang Figurines.**—KOJIRO TOMITA publishes, in *BMFA*, xlii, 1944, pp. 63-67 (4 figs. and cover illustration), three pottery figurines, recently acquired by the Museum of Fine Arts in Boston, belonging in the T'ang Dynasty (618-906 A.D.). These objects, like the Tanagra figurines, served as offerings in tombs. The list of subjects for these statuettes is great, but the most familiar are graceful women and spirited horses. The most interesting of these new accessions in Boston is a figure of a foreigner with a wineskin. This man is of Armenoid or Armenian type—people of this kind were thickly settled in Asia to the west of China, and in the T'ang period many of the Central or Western Asians with whom China had contacts were undoubtedly of this type. The wine-skin which he holds suggests that it was of a leopard or cheetah, whose fur was highly prized at that time. This would also point to the wine it held being foreign, as imported wines and liquors were much appreciated by the Chinese of the T'ang period. The man portrayed in the statuette may, therefore, be regarded as a steward employed in a wealthy or royal Chinese household. The other two figurines published in this article represent female polo players on galloping ponies. Their costumes show foreign influence. Polo was introduced from the West in the seventh century, and became a very popular sport. The article concludes with the statement that although the burial of figurines with the dead was practised both long

before and after the T'ang Dynasty, it attained its peak of excellence in that period. Laws were enacted regulating the number of figures to be buried with any individual, according to his rank, and as to the size permitted. The use of metal of any kind was forbidden. The specimens here published are dated in the eighth century, the best period of T'ang work.

#### U.S.S.R.

**Caucasus.**—The following summary of archaeological discoveries in recent years has been received from Professor VSEVOLOD AVDIEV through the Soviet Embassy in Washington.

An important contribution to the study of the ancient Caucasus was made by Academician Nikolai Marr, who established a close connection between archaeology, linguistics and the history of culture. Investigating the constant interaction of the complex intermingling of tribal formations, language forms and cultural elements, and analyzing them in their various stages of development from their prehistoric origins to their modern survivals, Marr and his school drew largely on the abundant material available on the ancient Caucasian cultures and languages.

Particular attention was focussed on the study of the ancient cultures of the Caucasian peoples. The result is that the study of the ancient history of the Caucasus, one of the oldest centers of metallurgy, which was of supreme importance, connecting as it did Europe with Asia, and in particular the countries of Outer Asia and the classical East with the world of the Aegean and Asia Minor, and even with Northeast Africa, has acquired a significance all its own in Soviet science.

The early occupation of the Caucasus is indicated by the discovery near Pyatigorsk of a Neanderthaloid skull and the excavation in the North Caucasus of Il'skaya, a Mesolithic site.

Of particular interest is the discovery in the North Caucasus of rich cultures of the Chalcolithic and Bronze Ages, when the specific metallurgy of the ancient Caucasus attained a high level of development. The period of this rise is indicated by the Kobyakovo settlement in the North Caucasus, where side by side with stone tools, were found bronze fragments and smelting crucibles, which clearly points to the local origin of this metallurgy. Extremely interesting is the pottery found here, ornamented with an ancient geometric pattern, strongly reminiscent of the linear designs of the archaic pottery of the East.



The Koban district is rightly regarded as the classical center of ancient Caucasian metallurgy, and the excavations in this region are therefore of the greatest scientific interest. The excavations of the Galiat tombs by Eugene Krupnov in 1935 revealed a curious combination of stone and bronze objects, which indicates the antiquity of the pre-Koban culture, and partly of the Koban culture itself. Excavations in Digoria during 1937-1938 revealed various types of burial, and made it possible to undertake a study of the origins and stages of the Koban culture, and also to establish its connection with other Caucasian bronze cultures.

Of historico archaeological significance are the megalithic relics, chiefly dolmens and cyclopean structures, mainly fortifications. Excavations of the dolmens on the Black Sea coast and in Abkhazia showed that these megalithic monuments belong to the Chalcolithic and even to the Bronze Ages. Excavations of the Abkhazian dolmens, for example, revealed copper and bronze articles of Koban type. Extensive archaeological work was carried out in Azerbaidzhan, where were discovered many relics showing a close connection with the cultures of the Ancient East, especially with that of the Urartu tribes.

Particularly interesting in this respect is the distinctively ornamented pottery found in Kyzyl-Vank and the Mil steppe, which is closely related to that of ancient Elam. In addition, of interest are the cyclopean fortifications of Azerbaidzhan, near which were found extensive tombs with stone sarcophagi and typical Trans Caucasian bronze articles of the Chaldaean epoch (B.C. IX-VII). The discovery of an Assyrian string of beads in one tumulus in Khodzhal points to the existence of trade and cultural communication between the ancient Caucasus and Assyria.

Archaeological investigations of the cyclopean fortifications of Armenia threw vivid light on the Caucasian culture of the pre-Urartu and Urartu epochs.

The systemization of these fortifications, particularly on the slopes of Aragats, and several finds, as, for example, obsidian tools, bronze objects and distinctive pottery, indicate that Trans-Caucasia at that period of existence of the Urartu State was the seat of a rich and flourishing culture.

Lastly, an entirely new chapter in the history of the ancient Caucasus was opened by the excavations of B. Kuftin in Georgia, for which he was

awarded the Stalin Prize. During these excavations, carried out during 1936-1940 in Trialeti, many tombs and tumuli were discovered, in which were found numerous and diverse objects relating to various epochs, from the Sasanid into antiquity. Particularly interesting are the numerous obsidian and bronze articles of Koban type. The most ancient objects were found in the tumuli. Among all these objects stand out highly artistic products of the jeweler's art: sumptuous and elegant articles in gold and silver, ornamented with filigree and studded and incrustated with precious gems, such as gold and silver chalices, the gold trappings of a standard and a silver chalice with the depiction in relief of ritual scenes. These art objects are analogous to the ancient treasures found at Ur and Kish in Iraq and in other parts of the Near East.

Excavations in recent years have made it perfectly clear that the ancient Caucasus with its highly developed and localized cultures belonged to the great world cultures, being connected with those of Asia Minor, Mesopotamia and even Egypt.

January 25, 1945

**Introduction.**—In 1943 S. V. Kiselev wrote a Report entitled "Soviet Archaeology in the War Years" from which the following notes have been excerpted. This Report was generously made available to us by Dr. L. C. Dunn through the Science Committee of the National Council of American-Soviet Friendship, New York City.

The Institute of the History of Material Culture of the Academy of Sciences in Moscow and Tashkent is continuing extensive researches in Central Asia, the Urals, Siberia, and the Greek Black Sea colonies. Many archaeological papers have been published since the war began: the State Museum of History published the 16th volume of its "Transactions" containing basic, richly illustrated material on the archaeological expeditions to the ancient Greek city of Phanagoria (V. D. Blavatskii), to the Altai (L. A. Yevtukhova and S. V. Kiselev) and to Suvara, a town of the Volga Bulgars (A. P. Smirnov). The Academy of Sciences also issued a number of archaeological papers in its various publications, among them reviews, summarizing the results of 25 years' work of Soviet archaeologists (for example, papers by S. V. Kiselev, V. I. Avdiev, and M. A. Korostovtzev in the "25 Years of Historical Studies in the U.S.S.R." and the paper by S. P. Tolstov and V. A. Shishkin in "25 Years of Soviet Science in the Uzbek Soviet Republic"). On the Lena River



in Yakutia, A. P. Okladnikov made a wonderful discovery in the sphere of palaeolithic art and V. P. Levashova carried out extensive prospecting work in Minusinsk and discovered hundreds of objects. A. N. Bernstam continued his work in Kirghizia and published a book "Archaeological Notes on Northern Kirghizia." In Turkmenistan ancient graves were excavated near Ashkhabad and the ruins of Anau were studied by archaeologists of Moscow University evacuated to that district. In Tashkent workers from the Institute of the History of Material Culture under the guidance of A. Y. Iakubovskii have studied intensively various problems concerning the history of Central Asia in the most ancient period, and in the period of Timur and the Timuridae. A special Commission headed by M. E. Masson has studied the history of mining in Central Asia. S. P. Tolstov examined the historical development of the ancient irrigated lands of Upper Khorezm (Khwarazm).

During the battle for Moscow, the builders of defensive works in one of the local villages found an earthen pitcher containing 2,712 silver coins dating back to the periods of Ivan the Terrible, Feodor, and Boris Godunov.

The archaeologists of the Caucasus are continuing their investigations in Armenia and in Georgia. Since the war began the first volume of Kuftin's reports of his excavations of the marvelous "golden" mounts on the Tsalke River has been published in Tbilisi. Another branch of the activities of Soviet archaeologists, which has become particularly important under war conditions, is their participation in the work of the Commission on Ethnogenesis of the Academy of Sciences of the U.S.S.R. A session of this Commission held in Tashkent in August, 1942, discussed the most important problems connected with the ethnogenesis of the peoples of the U.S.S.R. The chief papers read at the session were those of S. P. Tolstov. "Fundamental Problems of the Ethnogenesis of the Peoples of Central Asia," and "The Aral Nidus of Ethnogenetic Processes," A. Y. Iakubovskii "On the History of the Ethnogenesis of the Turkomans of the Eighth-

Tenth Centuries" and M. M. Gerasimov "The Restoration of the Excavated Human Type and its Significance for Questions of Uzbek Ethnogenesis." Archaeologists still continue their participation in this work. In July, 1944, S. P. Tolstov read a paper on "The Central Asiatic Pre-History of Russia," to a meeting for Moscow scientists arranged by the Commission.

The wartime work of archaeologists includes their participation in the compilation of a series of popular booklets under the general title of "Cultural Treasures of the Peoples of the U.S.S.R." S. P. Tolstov's "The Ancient Culture of Uzbekistan" has already appeared, "Ancient Russian Cities," "Heroic Rus," "Siberia, a Treasure Home of World Culture" and "Pskov and the Pskov Area" are in press; many other booklets are being prepared about Novgorod, Ukrainian antiquities, the Crimea, the Volga Basin, the Caucasus and Central Asia. With the same object in view the Moscow Department of the Institute of the History of Material Culture has organized a "History of Art" section which is compiling a single volume "History of Russian Art," and a "Section on Military History."

With regard to the training of young archaeologists, the Archaeological Section of the Department of History at Moscow University had fifty students at the end of 1943. Training is carried on in accordance with a normal curriculum and includes field work on the barrows and ancient town sites of the Moscow Region.

Among monuments destroyed by the Germans were: (1) the Cathedral of the Resurrection in Istra, a seventeenth-century monument later converted by Rastrelli and Blanc into a famous example of eighteenth-century Baroque; (2) the palace, including the museum, at Istra; (3) the Joseph Volotsky Monastery in Volokolamsk; (4) the churches and cathedral built by Kazakov in Mozhaik; (5) the Museum at Borodino Field; and (6) many monuments in Kaluga, Tuła and Kalinin, etc.

Among archaeologists killed were A. P. Kruglov, M. V. Talitskii and N. A. Sugrovov.

March 30, 1945



## BOOK REVIEWS

OLD ASSYRIAN LETTERS AND BUSINESS DOCUMENTS, by Ferris J. Stephens. Pp. viii + 30, pls. LXXXIV = *Babylonian Inscriptions in the Collection of James B. Nies, Yale University* vol. VI, New Haven, Yale University Press, 1944, \$5.

Thanks to the efforts of the late Professor A. T. Clay and his pupil Ferris J. Stephens, the noted present Curator of the Yale Babylonian Collection, Yale University has for many years been in the possession of several hundreds of Old Assyrian inscriptions dating from the twentieth or, according to the lower chronology recently proposed by Sidney Smith, nineteenth pre-Christian century. With the exception of a stone inscription of king Samst-Adad I, which Professor Stephens published in 1937, they belong to those precious letters, legal documents and commercial records which, by small and large lots, found their way from Kültepe (the ancient Kaniš, near Mazaka-Caesarea) into many public and private collections until, twenty years ago, B. Hrozný located the houses where the old business archives had been deposited almost 4000 years ago and where in our day the natives used to uncover the tablets. About one-half of the large collection owned by Yale University became known in 1927 through the posthumous publication of Clay's autographed copies of two hundred and thirty-three particularly well preserved tablets, to which Stephens contributed the indices. The remainder is now given by Stephens in the present volume, which contains his beautifully written copies of two hundred and seventy texts and fragments, preceded by a brief introduction, valuable lists of proper names, as well as the usual classification and description of the tablets.

Despite the fact that about sixteen hundred Kültepe texts have been published and studied during the past twenty-five years, Stephens' publication of a large additional lot is most welcome. To be sure, the new texts shed no further light on the much discussed political conditions under which, prior to the rise of the Hittite empire, three successive generations of subjects of the kings of Assyria developed and maintained a flourishing import and export trade that embraced large territories between the Assyrian capital city, on the one hand, and Hattuš (Bo-

ğazköy), on the other. Nor do they contain any reference to the—non-existent!—pre-Hittite town of Wi-lu-uš the identity of which with Ilios is being emphasized by non-Assyriologists such as W. Brandenstein (e.g., in *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 92, 1938, pp. 307 and 317), even though the incorrectness of Landsberger's reading of the town name Wu-lu-uš-na, which led to that unfortunate error, was demonstrated as early as 1924. But the new documents include so many hitherto unknown, or not sufficiently established data, that they greatly contribute to the elucidation of quite a number of special questions. For instance, regarding the economic life of the Assyrian residents of Anatolia, we knew so far that, while they were absent on business trips, their wives and servants had to take care of their homes, and that the latter's tasks sometimes comprised the breeding of oxen and sheep. From the letter No. 84 of the present volume it now follows that, at least occasionally, they also raised hogs; for this letter, which a certain Aššûr-muttabil addressed to two native servants, concludes with the following instruction: "If the swine (*hu-zi-ru*) will not become fat, sell them; (but) if they have become fat, keep them (lit., 'let them stay')." The passage is also interesting to the linguist: unless we define the ancient West Semitic dialects commonly called Amorite as Proto-Aramaic, it disproves an assumption of Landsberger (*Die Fauna des alten Mesopotamien*, p. 101), according to which the Assyrian language borrowed the term *huziru*, "swine" from the Aramaeans. Our knowledge of the historical geography of Mesopotamia is enriched by No. 176, a report on the disposition of merchandise which, *inter alia*, concerns wool purchased *i-na Ba-li-ḫi-im* "in the town of Balḫum." Since another text (No. 193) mentions a man from the town of Ibla (*Ib-lá-i-um*), an unfounded theory of Unger (*Reallexikon der Assyriologie* i, p. 394), according to which the extremely old city of Ibla was situated on the River Balḫ and identical with the Neo-Assyrian town of Balḫu, becomes definitely untenable. As for the history of the early religions of Mesopotamia and the adjacent countries, attention is, *inter alia*, to be called to No. 29. In mentioning a certain *Urad-<sup>a</sup>Nannar* "Servant of Nannar," this text



makes it sure that a slightly damaged passage of an unpublished Kültepe text of the Berlin Museum (VAT 9213) speaks of a gift vowed to the god Nannar (spelled <sup>4</sup>ŠEŠ-K[I]), and that the personal name *Wa-ši-bu-ru-ba-ni*, which occurs in a Kültepe text in the possession of the Louvre (J. Lewy, *Tablettes cappadociennes*, No. 201), actually means "He who dwells at Urum is creator." The conclusion obviously to be drawn from these data, viz. that the cult of the moon-god Nannar of the South-Babylonian city of Ur was popular in Assyria as early as the twentieth or nineteenth century, explains the well-known fact that the parhedros of the moon-god Sin of the West-Mesopotamian city of Harrân (Carrhae) bore the Sumerian name Ningal. Students of early Assyro-Babylonian art, finally, will be interested in the appendix, pl. LXXX ff., inasmuch as Stephens gives us here the photographs of a number of seal impressions (as found on tablet cases) which were not yet known from Clay's aforementioned volume or from the publications of other collections containing duplicate impressions made with the same seal cylinders. As the photographs are not always sufficiently distinct, it would have been desirable to accompany them with outline drawings.

The technical aspects of these seal cylinders and references to the books in which the duplicates were published are one of the subjects of Stephens' introductory remarks (pp. 3-6). In addition, he deals with the shapes of the two cuneiform signs *ah* and *mur*, in the distinction of which the scribes were sometimes not very careful, so that, as is well known to Assyriologists, the correct reading must occasionally be determined on the basis of the context or the variant writings and the obvious meaning of the proper names and words in which those signs occur. Another paragraph of the introduction concerns a feature which also has been well known for many years (see, for instance, my observations in *Revue Hittite et Asiatique* 17, 1934, p. 4, note 21 and *Mitteilungen der Vorderasiatisch-Aegyptischen Gesellschaft* 35, 3, 1935, p. 196, note 4), viz. the fact that many a case tablet bears on its inner surface the (negative) impression of the text of the tablet it once enclosed, whence it has frequently been possible to determine which inner tablet was originally enclosed by a case tablet. On the basis of this rule, Stephens succeeded in identifying a case tablet (a photograph of the inner surface of which he publishes on pl. LXXXII) as the envelope of a

text in the Louvre collection. It goes without saying that in all such cases the tablet and its envelope were separated by the natives who found them or the dealers who sold them to their present owners.

It also was always obvious that when in quite a number of instances (see, e.g., J. Lewy, *Die altassyrischen Texte vom Kültepe bei Kaisarije*, Konstantinopel 1926, pp. 66 f.) a text clearly represents the end of a letter the "first two pages" of which seem to be lost, this is likewise due to the circumstances of the clandestine excavations which led to the separation of tablets originally enclosed in one and the same case tablet. In fact, in the fourth part of his *Cuneiform Texts from Cappadocian Tablets in the British Museum*, Sidney Smith published, in 1927, a letter (B.M. No. 113573) which, in addition to the case tablet bearing the address, consisted of a main tablet inscribed on both surfaces and an "extra tablet" inscribed on only one side and containing the concluding lines of the text. Contrary to the impression conveyed by the remarks of Stephens, who seems to have been unaware of these data, it is therefore not surprising that the collection published in the present volume includes five of those "extra tablets." Stephens recognized them as such because, being inscribed on one side only, they had been placed upon the respective main tablets before the clay had dried—a procedure which, of course, produced a negative impression of one surface of the main tablet upon the blank surface of the "extra tablet." His observation that the remains of the largest of those negative impressions (No. 42) coincide with lines 2-18 of a text in the Istanbul Museum (KTS 40) is important because, being better preserved, the negative permits the restoration of a few more or less obliterated words of the original text. To all appearances, he overlooked, however, that, on the basis of the first line of the negative, this main tablet and its extra tablet can now be determined as a letter of a certain [S]â-ba-z[i-a], and that this conclusion is confirmed by the contents of a letter of the same well-known merchant which was published by Smith, *op. cit.* III, pl. 30.

The aforementioned lists of proper names (pp. 7 ff.) are skillfully arranged. Specialists will have no difficulty in correcting the antiquated rendering by *pāšišum* of the ideogram for *kumrum* "priest," the inexact transliteration of the personal name *Sâ-li-a* (the correct reading of which follows from No. 206 of Clay's above-quoted vol-



ume) and similar inaccuracies. They also will easily be able to complete these lists by the insertion of important items such as the divine name *Ištar kū-ku-bu-um*, the so far oldest occurrence of which distinguishes the text No. 55, the place name *Ba-li-ḫi-im* (genitive; see above), the gentilics *Zi-lu-na-um* (No. 193) and *Tal-ḫa-di-e-im* (gen.: No. 237) and others. As regards the description of the texts (pp. 19 ff.), it may be helpful to mention that Nos. 147 and 188 ought to have been classified as records of legal proceedings, and not as fragments of letters. Criticisms of this sort will not detract from the value of this publication, which will be favorably received by every Assyriologist and upon which Dr. Stephens is to be warmly congratulated.

HEBREW UNION COLLEGE  
CINCINNATI, OHIO

JULIUS LEWY

DELPHES, by *Pierre de la Coste-Messelière*. PHOTOGRAPHIES DE *Georges de Miré*; AVANT-PROPOS DE *Charles Picard*. Pp. 335, pls. 248; figs. 44, plans 3 in text. Editions du Chêne, Paris, 1943. 2100 frs.

This de luxe edition of photographs of Delphi, with accompanying descriptive text and notes on the illustrations, appeared in time to serve as a fitting commemoration of the fiftieth anniversary of the opening of the large-scale excavations of that site by the French School at Athens. No other great classical site has previously been presented to the larger public in so magnificent a popular form, for this book is on a larger scale than the earlier publications by Hege and Rodenwaldt of Olympia and the Acropolis. The idea is excellent, for the use of large numbers of good photographs, with brief and authoritative descriptions, would seem to be one of the best methods of making known to the general public the results of long and painstaking excavations and researches in the remains of antiquity. It is unfortunate that in this case the wartime economy of occupied France has made the cost of the book so high as to limit considerably its distribution among those people for whom it was primarily intended.

The book is divided into three sections, of which the middle one, consisting of the plates, is the most important. As an introduction to the series of plates there are some fifty pages of descriptive text, subdivided into five sections: The Origins, The Oracle, The Sanctuary, The History of Delphi and The Excavations. Thus in a short account, written in an interesting and not overly

erudite style, the reader is acquainted with most of the major facts of interest concerning the ancient sanctuary and the modern work in it. Not much is said of the period before the sixth century B.C., although in several places the author emphasizes the dual character of the site as a sanctuary of both an early female Earth deity and a later male god. But it was with the period of colonization that Delphi became the great Panhellenic center and the sanctuary assumed its more monumental character, and it is the great monuments that interest the author primarily.

Through the sixth, fifth and fourth centuries B.C., in particular, the great city states of Greece competed with one another in the magnificence of their offerings in the sanctuary of Apollo, so that the art of each of the great centers of the Hellenic world was represented here by its choicest examples. The wealth of the site at that time can be gauged somewhat by the faint reflection preserved to us in the present collection in the Delphi Museum. We are reminded that this collection includes none of the famous pieces which Pausanias thought worthy of mention. Plunder, destruction and the ravages of time have removed all of them, yet the collection remains one of the richest treasures of Hellenic remains.

Although French interest in the site began as early as 1860 and minor excavations were conducted here for several years, it was only with the moving of the village of Kastri from its site over the ancient sanctuary in 1892 that large-scale excavations could begin. In ten years of intensive work that followed, the major part of the sanctuary was uncovered. Reconstruction of the monuments began in 1903, when the Treasury of the Athenians was re-erected. In the forty years since this period of intensive digging, the French have continued their investigations of the site and the publications of the results of their work. They also continued the reconstruction of monuments, erecting the Altar in 1920, three columns of the Tholos in 1938 and eight columns of the temple in 1939-1941. As late as 1939 these small-scale excavations yielded such important remains as the deposit of gold and ivory objects. The work in the temenos of Apollo and in that of Athena are now considered finished, but in the area between the two sanctuaries and in the region about there is still much to be done.

The photographs for this volume were taken by Georges de Miré over a period of eight months. The re-arranging of the museum at the time afforded



an excellent opportunity to get new and better views of most of the sculpture. The photographs are grouped so that each building and its sculptures are together and these groups are arranged first in the Sanctuary of Apollo and then in the Marmaria; within each temenos they are then arranged in chronological order, so that in going through them the reader gets an historical, rather than a topographical view of the sanctuaries and this would seem the preferable method.

Plates 1-11 are views of the town of Kastri and studies of its inhabitants; 12-23 are views of the landscape, particularly of the breath-taking panorama from Kastri down to the Gulf of Itea. Plates 23-204 show the monuments of the Temenos of Apollo—No. 25 giving an exceptionally good view of the entire temenos: the series on Cleobis and Biton, Nos. 34-37, is good; Nos. 47-49 show the Naxian Sphinx and Nos. 55-59 the Caryatids of the Cnidian treasury. Plates 63-93 are all of the Siphnian treasury, showing in great detail the Caryatids, the friezes and the pedimental sculptures, in all an excellent series on that monument. The Treasury of the Athenians is shown in plates 107-122 and its metopes take up plates 123-137. Nos. 140-149 are devoted to the sculptures of the archaic temple of Apollo. The group showing the Charioteer, nos. 151-161, is certainly the most excellent of all and forms the high point in the volume. Perhaps it is only by contrast with this group that the next group suffers, but the photographs of the Thyiades, nos. 165-171, do not seem up to the standard of the others. The Thessalian group is shown in plates 183-191. The short series on the Marmaria comprises plates 214-235, and finally plates 237-243 show the Gymnasium and 246-247 the Stadium. This new series of plates will be of great value to the archaeologist and art historian, as well as to the interested layman, for many of the photographs are superior to any which have been available heretofore.

The third and last section of the book contains notes on the forty-four illustrations in the text and on the series of plates; it has as well three plans—one of the entire complex, one of the Sanctuary of Apollo (revised to 1943) and one of the Marmaria. The notes are very full and give a detailed explanation of the monuments illustrated, together with the generally accepted dates for them.

In the face of such a wealth of excellent material one can hardly ask for more, but I feel that the book would have been even more valuable if the selection of illustrations had been slightly

different. For a book with so all-inclusive a title, there are some omissions; at the same time there is some needless repetition in the illustrations. The chief omission is in the field of the smaller objects that were offered at the sanctuary and which afford a great wealth of interesting material which should have been represented much more fully in such a book. A few of them are shown in the illustrations in the text and are excellently presented; it would have been better to have eliminated those views of landscape, sculpture and architecture among the illustrations in the text which are largely repetitions of views in the plates and to have included more of the smaller objects. Many of them are worthy of a place in the plates as well, for without them the view of the ancient sanctuary is one-sided; it was a Panhellenic sanctuary in the widest sense. A few views of Delphi in its mountain setting might have replaced some of the numerous views of that setting taken from the site. Lastly, the "one-man-show" idea would have been abandoned to advantage if a few views of the Temple of Apollo with its columns re-erected had been included, for they give an entirely new and more interesting aspect to the temenos and such photographs were published by the French School in 1941.

The idea of such a monumental popular presentation of famous sites of antiquity is excellent and, in this case the execution is of the highest quality. Such publications present the work of the archaeologist to the general public in a most acceptable, informative and interesting form and it is to be hoped that similar works on other ancient sites will follow the brilliant example set by *Delphes*.  
PARIS SAUL S. WEINBERG

ATTIC RED-FIGURE VASE-PAINTERS, by J. D. Beazley. Pp. xii + 1186. Oxford University Press. Oxford, 1942. 63 sh. \$20, U. S. A.

What a great boon, for seventeen years, was *AV*! How small *ARV* now makes it look! The least (though an important) enlargement is in scope — extended to take in b. f. vases by r. f. painters, r. f. vases of the early fourth century, plastic "head-vases" and the white lekythoi of all recognizable artists or groups: not to mention valuable new indices, of proveniences (which were not recorded in the Tübingen edition), and of mythological subjects (this index is Jacobsthal's contribution). It is somewhat better measure of our new debt to Beazley to note that the Oxford revision of *Attische Vasenmaler* has over five



thousand more entries (bringing the total to nearly sixteen thousand), and distinguishes about two hundred and fifty more artists or groups (altogether, about four hundred). No wonder that the publishers ventured to print on their wrapper a surmise that in the new book "nearly all Attic red-figured vases are now assigned to their painters." I hope that American scholars, for whom there is some gleanings left to do, will not let this statement put them off the sport they may have in gratefully applying *ARV.* to supplementary attributions. But chiefly it is to be deprecated for the unwitting injustice it does to the reserve, as faith-inspiring as ever it was, of the author's connoisseurship. This work, as the user will soon discover, is no pretentious escapade of unrestrained "what's-whosing." From the not inconsiderable number of vases published and familiar that he has *not* included, one may guess how ruthless Beazley has been to his own half-certainties. Then again, a good few of the entries are placings (in a relation to the work of a distinguishable painter) rather than positive attributions. Some of Beazley's most judicious work is of course in those very limboes, his "nears . . ." and "manners of . . ." Here is discrimination not really less fine and just than that which he has exercised in the most striking of all his triumphs of confidently exact detection, the study (p. 581) of team-work and division of labor in the shop of the Penthesilea Painter. *Curiosa veritas*, strenuous and meticulous veracity, is the specific virtue of this book, in every part, and altogether. For it makes a whole; it is no mere directory, it is a laconic history—a history without dates, and all the honester for that lack (its department is one in which heroic veracity and chronological precision cannot yet quite go together). But the author has been at great pains to provide the proper aids to sharing his historical comprehension; all discernible threads and cross-connections are indicated, and (much more valuable than a speculative table of dates would have been) a list of καλοί is appended. Beyond estimation, the acumen (and punishing hard work) in the mere arranging: in general (so far as his method of subgrouping by shapes permitted), Beazley has undertaken to make the order in each list of attributions correspond to the development of the painter. Welcome, his extra provision for our curiosity about the original phase of red-figure: after the vases of the Andokides Painter, Psiax and the Goluchow Painter, a list of unattributable primitives.

The stupidest reception of this book, and surely the most disappointing to its author, would be to take it abjectly, for infallible. But no one who has made good use of the Tübingen edition (that is to say, hardly anyone who has seriously studied Attic art) needs to be told that the right way of depending on Beazley is to make his discoveries one's own. From even a giant's ankles, there is not much to see, and less to say; but scholars of much less than Beazley's stature, if they have the energy to climb to his shoulders, will doubtless find that the glorious view includes some addenda and even corrigenda. However that may turn out, there is little risk in remarking that no archaeological investigation ever yielded such a treasure of exploitable certainty as is laid up between the covers of *ARV.*: certainty, it is flat truism to say, that is mathematical; threads of identity, out of which the student of any development in the style of Attic red-figure, or in its subject-matter, should be able to knot himself a clue of sure guidance.

The admirable indexing of the old *AV.* made it a precious gazetteer for more purposes than the author can have contemplated. It told the mere tourist where (sometimes in the most unpromising wastes) he would find museums of classical antiquities: it revealed to the librarian and the "curator of photographs" what they lacked. It was the vase-collector's guide to the trade, and the trade's guide to collectors. In such ways, the enlarged edition is of course of greatly increased value; for bibliography, it is immeasurably more useful: in *ARV.* is caught the great flood of publications that *AV.*, as much as any cause, undammed.

To the publishers of such a work, at such a time, a share of our gratitude and congratulations. To express it, a reviewer had best echo, without spoiling, words of the author, which thank the Delegates and Staff of the Oxford University Press "for undertaking the book, and producing it in spite of difficulties, *patriai tempore iniquo*." I have no doubt that we shall some day thank them for a reissue possessed of the only virtues of the first edition which the second does not have, handiness and a table of contents. Two volumes would be better than one (save that one which, in a perfectly convenient world, would be printed on India paper, for the traveler). The excluded table of contents has taken its gentle, auspicious, revenge: there is no thirteenth chapter! What is to be done, and done now, to remedy



a drawback inherited from *AV.*, hardly felt there but here really troublesome, the inconvenience of the references to the *Corpus Vasorum*, now so much larger and more reference-worthy than it was in 1925? Beazley's citations very often (indeed generally) suppress the number of the fascicle: a practice that seems to take for granted either that we have superhuman faculties or that we have regrouped the plates of the *CVA*. Unless I am mistaken, the rule in American libraries is to leave the *Corpus* in its natural state, unreshuffled. One may be irked by the system of chequered arrangement that makes some fascicles of it seem like hands at cards, but there is (for us) no changing that now. Can we hope that Beazley will in his future writings change what is cryptic in his method of citing the *CVA*? Proverbial in America, this scholar's consideration for his juniors: the present work, so punctilious in acknowledging their contributions, gives fine evidence of it. I am sure we have only to tell him that, for the ordinary user of the *Corpus* in this country, a reference that omits fascicle number is, more often than not, simply blind. Meanwhile, some favor the least adequate review of *ARV.* can earn, if it supplies the baffled with a partial key (I dare not take space for a complete one). In referring from this book to red figured vases published in certain fascicles of the *CVA*, it will save time to have noted that: for the Louvre, in suit III I c, pls. 1-10 are in France 1, 11-24 in Fr. 2, 25-32 in Fr. 8, 33-55 in Fr. 9, 56-59 in Fr. 12; in III I d, pls. 1-4 are in Fr. 2, 5-19 in Fr. 4, 20-29 in Fr. 5, 30-35 in Fr. 8, 36-49 in Fr. 12, 50-55 in Fr. 14; in III I e, pls. 1-8 are in Fr. 8. For the British Museum, in III I c, pls. 1-25 are in Great Britain 4, 26-45 in Gr. Br. 5, 46-82 in Gr. Br. 7, 83-105 in Gr. Br. 8. For Oxford, pls. 51-67 of III I are in the second fascicle (Gr. Br. 9). For the Villa Giulia, in III I c, pls. 1-14 are in Italy 1, 15-39 in It. 2. For Rhodes, in III I c, pls. 1-4 are in It. 9, 5-10 in It. 10. For Brussels, in III I c, pls. 1-9 are in Belgium 1, 10-20 in Belg. 2; in III I d, pls. 1-4 are in Belg. 1, 5-11 in Belg. 2 (also III I e, pls. 1-2). For Scheurleer vases: III I a-b-c, pls. 1-4 are in Holland 1, III I b-c, pls. 5-10 are in Hol. 2, III I d, pls. 1-2 are in Hol. 1, 3-4 in Hol. 2. In the Danish section (with continuous plate-numbering which disregards suits), fascicles 3 and 4 have Attic r. f.; fasc. 4 begins with pl. 145.

Some desultory notes. Perhaps the new edition's most important departure from the old is in recognizing the Andokides Painter, pioneer of

r. f., as a worker in b. f. also (= the Lysippides Painter of Beazley's *Attic B.F.*); his debt to Exekias is emphasized. After canonic works (in either or mixed technique), Beazley has listed in *ARV.* more than a score of pieces as a group in the manner, but not by the hand, of the Andokides Painter; two more, panathenaics in Nauplia and Boston, he has appended in the meantime (*AJA.* 1943, 443), attributing them to the painter of Würzburg 267 (manner of A.P. no. 5). D. von Bothmer and I agree in adding to the group of the Andokides Painter the b.f. amphora (type A; foot alien?) which is no. 18 of the Bourguignon sale-catalogue (*Vente Drouot 18-20 mars 1901*, pl. 1): A, Herakles in Amazonomachy, B, Dionysos, Hermes and silens: now at San Simeon in Mr. William Randolph Hearst's collection. Thanks to an opportunity of studying its unpublished side, I have no doubt whatever that this is also a work of the painter of the Würzburg amphora 267. Its inclusion in the Andocidean group makes some difference, helping to show that no. 19 thereof, the Würzburg mastos 391, is less closely connected with that Würzburg amphora than the comparison on p. 6 of *ARV.* suggests. Is not the mastos to be linked rather with the quasi-panathenaic London B 208 (manner of the Andokides Painter, no. 10) and the neck-amphora in Cambridge 48 (manner of A.P. no. 8), vases which are certainly by one hand, that (I conjecture) of another remarkable satellite, whose style is drier and crisper? Unless I blunder, a minor work of the painter of London B 208 is the jerky komos on a Cambridge kotyle (*CVA*. Gr. Br. 11, Ricketts and Shannon pl. 3, 3). However, one might put with (or not far from) the Würzburg and San Simeon amphoras the New York amphora 12.198.4 (*ARV.* p. 948 in *Addenda*) and the ex-Bateman amphora (manner of A.P. no. 4) which in *ARV.* (p. 948) is compared with it. Note that since *ARV.* was published Beazley has connected with the Nauplia panathenaic (and thus with Würzburg 267) the New York hydria 14.105.10, manner of A.P. no. 17 (*AJA.* 1943, *loc. cit.*).

Mrs. F. M. Hamaker has convinced me that an unpublished fragment of a b.f. amphora in Berkeley at the University of California (8/4181-a, departure of chariot) is certainly by the hand that painted the Louvre hydria F 295 (manner of Andokides Painter no. 12; cf. no. 1 of the same list). I wonder if a hydria in Compiègne, published perhaps better by Gerhard (*AV.* pl. 314) than in *CVA.*, has not some right to a place in the group



of the Andokides Painter. Also a neck-amphora (MS 5467) in Philadelphia at the University of Pennsylvania (*MJ.* 8, pp. 146 f., figs. 52 f.)? If the hydria London B 302 is truly a work of the Andokides Painter himself (p. 4, no. 26), should we not attribute to his hand the neck-amphora in Berlin which is relegated to the list of vases merely in his manner (p. 7, no. 9)? Or *vice versa*?

An Andocidean vase, Würzburg 267 (p. 5, no. 5), is as good an excuse as any for a grumble at an established convention with which (evidently) the author is not in love, but from which his book does not quite break away: that of dubbing the leading lady of Dionysiac scenes Ariadne, indiscriminately—without distinguishing between classical art, in which Ariadne has won her place as consort of Dionysos, and archaic, to which (in this connection) she is perhaps a stranger. In the present case what is the charioteer's title to that name? Is it that the young (not merely stunted) satyrs taken for an outing on this vase guarantee the picture to be a family group (paterfamilias not the exhibitionist on the chariot pole, but the figure leading on foot, Dionysos)? Even the inscribed Ariadne on the Polygnotan krater in Compiègne (*ARV.* p. 698, no. 52), a vase which perhaps does pose a problem in genetics, cannot induce me to impute that whimsy to our author, and I hardly think that he would really object to a preference for "nymph" or even (if the hint offered by an inscribed vase, *Bull. Nap.* n.s. 6, pl. 13, should be taken) "Semele." Altogether, there is something wrong with the jargon we are accustomed to use in interpreting Dionysiac scenes in Attic art. It has too little local color: apart from Ariadne's eclipse of the more highly honored Semele, in our overdoing of "maenad" we advertise our indifference to the importance of Dionysiac nymphs in Attic legend and religion.

P. 13. Oest. Mus. 234 (b.f.), not 319 (r.f.), was the vase which Miss Haspels connected with the Sappho Painter (*ABL.* 112).

P. 159. To the group of the Goettingen Painter, D. A. Amyx is inclined to add a column krater (framed pictures) in the Art Museum of Portland, Oregon (26.305): A, woman with sacrificial bull; B (incomplete), athletes.

P. 251, Brygos Painter no. 78; p. 538, Clinic Painter nos. 7 and 8; p. 622, no. 6 in group of Painter of London 777. The notes of provenience (Orvieto) derive from mistakes in the inventory of the University of California, which led me astray in *CVA. U.S.A.*, 5. As Mrs. Dohan afterwards

proved to me, these cups came from a Faliscan site (not more exactly known, probably Narce). By the evidence of an inscribed photograph (at the Museum of the University of Pennsylvania) they belonged to one tomb group, resulting, it would seem, from several burials; the Attic r.f. is miscellaneous (together with late archaic vases, others fully classical, including a two-decker stamnos which is in Berkeley, not yet published); two Faliscan dishes with "Meidian" heads are later than any of the Attic pieces. I now distrust the "Orvieto" provenience recorded for other Berkeley vases; *ARV.* p. 557, Sabouroff Painter no. 21; p. 606, Wedding Painter no. 8; p. 618, Painter of London E 777, no. 12.

P. 339. To the frameless column-kraters of the Boreas Painter add 26.302 in the Art Museum of Portland, Oregon: A, satyr pursuing nymph; B, satyr dancing before nymph.

P. 342. Florence Painter no. 15 ("Roman market. A, youth and men and woman with armor. B, youths and boy"). To that description answers a column-krater in the collection of Mr. Victor Merlo of Hollywood, whose antiquities, when he kindly allowed me to study them, were lent to the Los Angeles Museum of History, Science and Art; the armor on it is a sheathed sword held in the woman's left hand, and a shield (with dotted rim and device of a wolf's head) in her right. The same piece? In any case, by the Florence Painter.

P. 363, 21 bis for the Pan Painter. A companion for this nuptial lebes is a loutrophoros attributable with equal certainty to the Pan Painter, at Houston, Texas (Museum of Fine Arts, 37.10): bridal procession of women and two children; on the neck, women (one with loutrophoros). This vase is one of three of its rare shape which were given by Miss Anetta Finnigan to the Houston Museum. The others are later; the style of the latest (37.12: bridegroom, bride and other figures; on the neck, women) reminds me of the Washing Painter's. I owe my acquaintance with these Texan loutrophoroi to photographs kindly lent me by Mrs. Blegen.

P. 424. Manner of the Niobid Painter, no. 1, a lost vase, known only from a detail of Copley's portrait of Ralph Izard and his wife, in the Boston Museum of Fine Arts. In the meantime, Copley's impression of this piece has been reproduced on a conveniently large scale by Dinsmoor, *Proceedings of the American Philosophical Society*, 87, 1943, fig. 4 facing p. 75. He quarrels gently with



Beazley's assumption that it belonged to Izard (p. 76; note 14).

P. 428. Painter of Bologna 279, no. 1. In *CV.A.* U.S.A., 10, p. 39, I have tried to defend Miss Guarducci's different interpretation of one of the neck-pictures on this amazing vase, and have risked a new reading of the scene on B of the body. The received one (Argonauts), from which Beazley has not departed, seems to me not so much unenterprising as ill-founded; in a group of Argonauts at least two or three figures should be characterized and recognizable; but here what could seem Argonautic apart from Athena and the mere multitude of the figures?

P. 444. Painter of the Yale Lekythos, no. 17, "Naples market (Canessa). Woman tying her girdle and woman with mirror." Major George H. Goody independently attributed this piece to that painter (if it is identical, as I think it must be, with a lekythos which Mr. Victor Merlo lent to the Los Angeles Museum of History, Science and Art).

Pp. 448 f. Dresden Painter. Another of his works is a Nolan amphora at Los Angeles (lent by Mr. Merlo): A, woman, holding mirror, standing by wool-basket; B, youth.

P. 519. Mount Holyoke Group rather than "Holyoke Group." There is quite a difference: all the difference between Oxford and Cowley.

P. 574. Important news, of a long lived error's death and burial. Beazley's complete separation of the Pistoxenos from the Penthesilea Painter has now won Diepolder's chivalrous assent.

P. 692, Harvard 2266. Cf. D. A. Amyx's independent placing, *AJA.* 1942, 576.

P. 677. Beazley now distributes among no less than four hands the vases signed "Polygnotos." This makes it harder than ever to dissemble the suspicion that the signers had no right to the name, and were trading on the reputation of the great Thasian. Sinister, so far as the record goes, the proveniences: a cheat for export only?

P. 693. Christie Painter. No. 17 is now in Detroit; independently it was attributed by Amyx.

P. 725. Eretria Painter. No. 6, white ground lekythos in Kansas City. My attribution of this vase, generously acknowledged, was independent, but (as I told the author in reporting it) someone, whose name seems not to have been recorded at the Museum, anticipated me. Does any colleague know to whom credit for first attribution should be given?

P. 798. Polion, no. 12. Independently attributed in *AJA.* 1940, 162.

P. 846. Talos Painter, no. 3. This charming fragment now belongs to Dr. Paul Friedländer, Los Angeles.

H. R. W. SMITH

UNIVERSITY OF CALIFORNIA

KLEPSYDRA AND THE PAVED COURT OF THE PYTHION, by Arthur Wellesley Parsons. A Dissertation submitted to the Board of University Studies of the Johns Hopkins University in conformity with the requirements for the degree of Doctor of Philosophy, 1942. Pp. 78, ills. 42. Baltimore, Maryland.

The dissertation of Arthur W. Parsons first appeared as an article in *Hesperia* XII, 1943. In this review, Parsons' monograph is not considered as a dissertation but as a "preliminary presentation of the results of an excavation." In this respect, it is an excellent piece of work, and as neat a job of excavation as any done in the Agora.

The *Testimonia* (pp. 264-267) show how little is known from literary sources concerning the Athenian spring called Empedo and later Klepsydra. Our knowledge has been greatly enlarged by the excavations and investigations of Pittakis, Burnouf, Kavvadias, and Parsons. The earlier name, Empedo, means "firm set" and describes accurately the spring which is several meters deep and embedded in rock. Parsons rightly claims Empedo as the name of a nymph; he could have mentioned the occurrence of the names Empedia and Empedion in Attic prosopography. The later name, Klepsydra, means "secretly (or stealthily) flowing water" and is thus also very appropriate.

The spring Empedo and later the well Klepsydra served as a water supply for the people of Athens since prehistoric times. The main evidence of its use before the Persian Wars consists apparently of pottery found in pits which were dug to tap the water of the spring. Students interested in this early period and in Athenian pottery will regret that Parsons was unable to publish the pottery found during the excavations. He also refrained from publishing the inscription found on one of the blocks of the parapet (pp. 239-240), and his work will need a supplement also in this respect.

Empedo was transformed into Klepsydra sometime after the Persian Wars, during the Kimonian period. This date is, in part, derived from the



fragments of pottery found behind the walls of the spring house. This pottery remains unpublished except for a small, in my opinion insignificant, sherd of late black-figured design. Sufficient evidence is provided, however, by the workmanship of the walls which are compared with those of the Tholos and of the Acropolis. Parsons, therefore, asserts "we may well believe, I think, that Klepsydra and the Paved Court were, in their original form, the work of Kimon." Statements of this kind have, of course, only a symbolic value.

This may be the proper place to review the evidence concerning the Paved Court, the identification of which is one of the original contributions of Parsons' monograph. Next to the well of Klepsydra there is "a large paved court, open to the sky, constructed with great care, and dating in all probability from the time of Kimon . . . although Klepsydra and the Court share a common wall, and were part of a single building scheme, they were thought of as wholly separate in function." Parsons assumes that this paved court was "a kind of pompeion, where certain of the pythaistic gear might be kept, and where some parts of the procession [the Pythais] would have been prepared, while the larger units formed in the street outside." A little later Parsons admits "we cannot point to any direct correlation between these facts [the history of the Pythais] and those of the history of the Paved Court; but there are no contradictions either." No reviewer should go beyond this fair self criticism. Parsons, in his desire to supply some additional evidence for his identification, publishes a "boundary stone of the sacred road by which the Pythais proceeds to Delphi." The only connection between this important inscription and the Paved Court is provided by the fact that the court opens towards the Panathenaic Street which presumably also served as the beginning of the sacred road to Delphi. I do not seriously question Parsons' interpretation of the Paved Court, but readers should be cautioned that it is neither proved nor even supported by any undisputable evidence.<sup>1</sup>

Nothing is known of the history of Klepsydra during the four centuries after the construction of the spring house. If any architectural changes were made, they are at present not distinguishable. Even the siege of Athens by Sulla brought no damage to the well. "Shortly afterwards, however, an accident occurred which permanently affected the spring house, and was a presage of worse to

follow. This was the shifting of at least one of the huge masses of rock which formed the roof of the cave." Subsequently, a thorough restoration was undertaken in the course of which three early bases were set up as a parapet or rather as a retaining wall. One of these carries an archaic inscription (which remains unpublished). There are some later inscriptions engraved on another block of the reconstruction; these inscriptions are not mentioned, although they might give a clue to the date of the restoration. This date is determined by Parsons from the contents of the fill behind the marble parapet. The contents of this fill are described as "markedly homogeneous, evidently deposited at one time," and a few lines later it is said that this fill "can be nothing but the debris removed in a cleaning out of the drawbasin itself." Of chronological importance are only seven coins (unpublished), fifty-three stamped handles (unpublished), and three small fragments of a large Megarian bowl (illustrated). It is to be regretted that here again the evidence had to remain unpublished, and the reader has to trust the judgment of the author or of his informant. Yet the occurrence in the fill of sling bullets and arrowheads will persuade even the overcautious that the date suggested by Parsons (shortly after Sulla's siege) is well founded.

About a hundred years later, in the time of Claudius, "both the spring house and the Court suffered damage which permanently changed their aspect. . . . Large masses of limestone broke away from the roof and blocked the whole of the west side of the spring house." In order to make the well accessible, part of the Court had to be turned over to the public. The privacy of the remaining eastern half of the Court was assured by the construction of a cross wall of which there is little preserved. The date of this second restoration is given by some pottery (two good samples are illustrated in figure 27). On the basis of this evidence (supported by fragments of terracotta lamps of known type), the repair should be dated "not much later than the middle of that [the first] century." To the same period belongs an extensive repair of the Panathenaic Road (on which Klepsydra lies), which is recorded in an inscription and on coins, and which has been traced by the excavators. The broad marble stairway which led up to the Propylaia must therefore be earlier; Parsons does not say this but he implies this deduction. Finally, the earliest of the votive plaques dedicated by the Attic magistrates to Apollo

<sup>1</sup> See Carl Roebuck, *Cl. Phil.* xl, 1945, pp. 52-53.



Pythios (called in the inscriptions ὑπ' Ἀκραις, Ὑπάκραιος, ὑπὸ Μακραις) belong to the years 40/1–53/4, thus to the reign of Claudius. If the Paved Court was really part of the Pythion, this date may be not accidental, but connected with certain changes in the sanctuary.

At the end of the second century after Christ, after Pausanias had visited Athens, another rebuilding of the well took place, and the water was made "directly accessible to the garrison of the Acropolis by incorporating it [Klepsydra], within the fortifications of the citadel. . . . A vaulted well house was made . . . high above the basin. . . . A circular shaft was driven through the floor of the well house so that buckets could be lowered to the water, about five meters below." The spring was made totally inaccessible from the outside by closing all openings with debris and cement. As always, this fill of debris provides the date of the structure. A single preserved jar (illustrated) can be dated, and it in turn dates the construction of the well house into the late second century after Christ. At this time the Paved Court "appears to have been abandoned, for debris began to accumulate over the floor."

"From now on, the spring was accessible from the Acropolis, and only from the Acropolis. . . . Early in the sixth century after Christ, a huge cistern was constructed not far below the spring" in order to receive the overflow and make the water available to the inhabitants of the city on the north slope of the Acropolis. Parsons compares this cistern with two other similar structures on the Acropolis and in the sanctuary of Asklepios. All three reservoirs have to be dated ca. 500 A.D., and Parsons could (and should) have added another water construction of this period: the Roman Water Mill which he himself published several years ago. We have, incidentally, a tombstone of this period, recording the death of Andreas who was ὑδραγωγός and ἀρχιτέκτων τῶν ὑδάτων. Parsons suggests that the cisterns be dated in the time of Justinian, but this again is only a symbolic attribution.

Finally, in the tenth or in the eleventh century, the well house was converted into a chapel of the Holy Apostles. Remains of the frescoes were still visible in 1874 but have since disappeared. For the Frankish and Turkish periods, and for the time of the Greek Revolution, the literary evidence becomes more plentiful and is skilfully used by Parsons to describe the history of Klepsydra.

A review of this monograph would be incom-

plete without the mention of the excellent drawings which accompany it. The originals of these drawings were made by John Travlos.

THE INSTITUTE FOR  
ADVANCED STUDY

A. E. RAUBITSCHKE

PAPYRI FROM TEBTUNIS, Part II, edited by E. M. Husselman, A. E. R. Boak, and W. F. Edgerton, Michigan Papyri, vol. V. Pp. xx + 446, pls. VI. The University of Michigan Press, Ann Arbor. Humphrey Milford, Oxford University Press, London. \$5.00.

The papyri published in this volume belong to the same lots as those of Michigan Papyri II, *Papyri from Tebtunis*, Part I, which are described in the Introduction to Part I. They include most of the papyri from the grapheion of Tebtunis in the University of Michigan. The task of editing the texts was divided as follows: Dr. Husselman has edited the Greek contracts of sale and other documents involving titles to real estate as well as the numerous Greek subscriptions to contracts; Professor Boak has edited the other Greek texts; Professor Edgerton the demotic texts. In addition, Professor Youtie gave much assistance in reading many of the more difficult passages in the texts.

After an introduction containing valuable remarks on the grapheion at Tebtunis, on the subscriptions and the demotic texts, on grammar, on orthography and on prosopography, the editors proceed to the texts. Nos. 226–232 contain petitions. The first text, no. 226, a petition to a strategos, is remarkable. The petition illustrates the way in which the priesthood managed some of the temple properties—in this case, a granary—by leasing them to private persons who undertook their management (cf. my article, *Lat. Zen.* LIII, pp. 243 ff.). It shows further that the lease expires with the death of one of the lessees. Accordingly, the lessors repossess themselves of the granary and, finding out that the surviving lessees had carried off the doors and had not kept the plaster in repair, request the strategos to order the epistates to inspect the premises and to send the accused to him for trial at the coming assizes. It may be mentioned that inspection as a means of proof occurs also in Ent. 65 (cf. my book, *The Law of Greco-Roman Egypt in the Light of the Papyri*, p. 396) and the request ἐκτέμψαι ἐπὶ σὲ τοὺς ἐγκαλουμένους πρὸς τὴν ἐσομένην ἐπέξοδον is very frequent in the papyri of the first and even at the beginning of the second century A.D. (*ibid.* p. 374<sub>67</sub>). No. 228 is a petition for ὕβρις, per-



petrated on the petitioner and his wife, as whose statutory representative he is acting (*idem.* p. 386<sub>1</sub>). The first four lines of the text are a brief summary of certain significant items concerning the petition made by a clerk at the grapheion and reminds one of similar summaries in the Magdola papyri of the Ptolemaic epoch. The petitioner points out that in consequence of blows, his wife, who was pregnant, gave birth to a dead child and was confined to bed and in danger of her life (*ibid.* pp. 333, 335; and Mich. VI, nos. 423-424). The petition asks, like no. 226, that the elders (cf. on πρεσβύτεροι Vertel, *Liturgis*, p. 147) send the accused persons for ἐσομένη ἐπέξοδος. In no. 229, a petition to a strategos for assault and damage, the term ἐπ' αὐτοφώρῳ occurs (cf. Taubenschlag, *op. cit.* p. 347<sub>164</sub> and Westermann, Keys and Liebesny, *Zenon Papyri* ii, No. 74<sub>25</sub>). The petition is a δίκη βλάβης (cf. Taubenschlag, *op. cit.* pp. 349<sub>105</sub>, 350<sub>188</sub>). It is noteworthy that the lessee and not the lessor sues in this case. In no. 230, a petition for theft, the terms ληστικῶ τρόπῳ (*ibid.* p. 347) and the means of proof by ζήτησις (*ibid.* p. 419) are found. It is remarkable, too, that the petitioner sues also for ὕβρις because the defendant caused a child whom the plaintiff was carrying on his shoulder to fall to the ground and receive grave injuries. No. 231 mentions χειρογραφία, a "record drawn up by officials or by notaries at the request of the interested party" (cf. *ibid.* p. 394) and the διαλογισμός with the interesting additional clause, "πρὸς τὸ ἐκ τῆς ἐκείνου δίκαι[ο] δωσίως τυχεῖν τῆς ἀρμοζούσης τιμωρίας." No. 232 is of exceptional interest. The text was published by Boak (*JEA*, xix, 1933, pp. 138-142), with a commentary done in his usual brilliant manner. From the legal point of view the papyrus offers the first example of an execution of μεσιτεία (cf. Mitteis, *Grundzüge*, p. 131) on catocic land. In case neither the principal of the mortgage nor the interest had been paid, the creditor laid claim to the mortgaged property by virtue of a transfer of title executed through the bureau of registration (μετεπιγραφή). The μετεπιγραφή, however, was not completely valid until the debtor had made an ὁμολογία ἐκστάσεως. This corresponds to the executorial proceedings on hypotheses. The creditor, if unpaid on the date due, could claim the thing as forfeit (ἐπικαταβολή). It seems, however, that in this case also the acquisition of foreclosed property required a respective statement of the debtor: an ὁμολογία ἐκστάσεως (cf. *ibid.* p. 214<sub>10</sub>). In addition, the

papyrus brings valuable information on the activities of the exegetes in the field of guardianship (*ibid.* p. 122) and on his right to authorize the clerk of the grapheion to prepare certain documents affecting the transfer of catocic land and issuing an order to this effect. The regular authorities to whom petitions of this sort were addressed were the βιβλιοφύλακες. The explanation may lie in the early date of the papyrus. So far as we are aware, the earliest reference to the activity of the βιβλιοφύλακες in authorizing the action of the grapheion is found in *BGU* 112 of 63 A.D. Finally, the papyrus mentions the appointment of a mother as ἐπίτροπος by the officials (cf. *ibid.* p. 116).

No. 233 (*SB* III, 7174) is an oath of the sluice guards; nos. 234-236 are receipts for Fascaes; nos. 237-238 are grapheion registers. In no. 238 (v. 182, cf. nos. 340, 20-26; 341, 2-4; also Mich. II, 123 Recto II, 18 and VII, 31) the συγγραφή τροφίτις is recorded with the dowry, but the alimentary sum is omitted. This means that, under the influence of Greek law, Egyptian maintenance contracts absorbed the Greek φερνή, a characteristic of Greek matrimonial contracts. In no. 240 (a grapheion register), col. II, 64, the ὁμολογία - τροφίμου καὶ δανείου deserves attention. It evidently refers to a contract with a nurse to whom payment in advance in the form of a fictitious loan (cf. Taubenschlag, *op. cit.* p. 298) was made. No. 241 (abstracts of contracts), lines 25-28, refers not to a loan but to a contract of services (*locatio conductio operarum*) where partial advance payment was made (*ibid.* p. 282). The papyrus confirms Westermann's view (cf. Westermann, *op. cit.* pp. 218, 977) that this kind of contract tends to stress not so much the services to be done as the restrictions upon the right of movement which the contractors lose at least temporarily.

Nos. 243-48 relate to gild ordinances. In an excellent article entitled "The Organization of Gilds in Greco-Roman Egypt" (*TAPA*, lxviii, 1937, pp. 212-220), Professor Boak has analyzed nos. 243, 244, 245 and has made a comparison between them and the other gild ordinances, Greek and demotic. No. 246 refers to contributions to a gild of Harpocrates; nos. 247-248 contain a list of members of a gild. In no. 244, lines 3, 6 (cf. 311, lines 29, 42) an association of ἀπολύσιμοι τῆς οὐσίας is mentioned. This may be a privileged group of γεωργοὶ τῆς οὐσίας exempt from some taxes (e.g., from the βαλανευτικὸν τέλοςμα, cf. no. 312, lines 29, 42), or personal services. Such a



γεωργός is called (F. G. Kenyon and H. I. Bell, *Greek Papyri in the British Museum* ii, p. 147, no. 445, lines 1-6; cf. also Ross, *Georg.* ii, 1212, 15; iii, 3-6, 8, 15, 21), γεωργός τινῶν ἐδάφωv λούλιας Σεβαστῆς καὶ Γερμανικοῦ Καίσαρος ὄντος δὲ καὶ ἀπολυσίμου τῆς αὐτῆς οὐσίας. This corresponds to the fact that in every temple a certain number of *lepeis* were also granted some privileges such as exemption from *λαογραφία* and such *lepeis* were also called ἀπολύσιμοι (s.c. *λαογραφίας*). Cf. W. Otto, *Priester u. Tempel* ii, p. 247.

Nos. 249-309 are Greek and demotic sales. In no. 254, a sale of sacred land, the provision is made that the existing lease remain in force in the year in which the sale is made. This provision proves that the principle "Kauf bricht Miete" prevailed in Egypt. No. 262 is an execution of a sale on credit. The seller has drawn up the contract for the transfer and cession of the property to the buyer through the *catoecic* record office three years earlier and at that time he received a partial payment in cash. Now, after three years, he receives the rest of the price and acknowledges the cession. Evidently the former documents contained a provision to this effect. It is noteworthy that the rest of the price is procured by the conveyance of a part of the dowry, recorded in a *συγγραφὴ συνοικεσίου*. Originally all financial questions were settled by a special deed, the s.c. *συγγραφὴ ὁμολογίας*, while the s.c. *συγγραφὴ συνοικεσίου* dealt with questions of personal nature (cf. Taubenschlag, *op. cit.* p. 85). The papyrus shows that in the course of time the *συγγραφὴ συνοικεσίου* took over also financial questions in the same way as the *συγγραφὴ ὁμολογίας* took over questions of a personal nature (cf. *ibid.* p. 86). Nos. 264-265 are sales of slaves (or *divisio parentis inter liberos* in the form of a sale? cf. *ibid.* p. 155) with the common clause guaranteeing against *ἱερὰ νόσος καὶ ἐπαφή*, while in nos. 278-279 epilepsy as well as flight are excepted from the guarantee (cf. *ibid.* p. 251). No. 266 (38 A.D.) sets forth the obligation of the declarant to convey the property formally (*κατάγραφειν*; cf. *ibid.* pp. 243 ff.) to the buyer whenever he may demand such a conveyance to be made. This conveyance is to be executed through the *grapheion* of Tebtunis. In the subscription, the father-in-law of the seller agrees to see to it that his daughter and the wife of the seller will approve the conveyance whenever it is executed. Very similar is BGU 50 (M. Chr. 205;

114/15 A.D.) in which the seller of a plot of land, executed by the means of a *χειρόγραφον*, declares also that he will convey the same plot: κατὰ δημοσίους χρηματισμός. Note that in no. 266 (line 25) *κατάγραφη* is equivalent to a *πράσις*, as was the case in Dura as late as the second century A.D. (cf. Taubenschlag, *op. cit.* p. 248). It may be noted that the buyer is dealing with a relative as the woman's guardian, although her husband is still alive (line 14, ὄντος δὲ σου ἀνδρός); evidently because he is absent or otherwise prevented from so acting (cf. *ibid.* p. 131). The necessity for the daughter's approval lay in her *κατοχή* on the parent's property which had been conveyed to her husband (cf. *ibid.* p. 158; see also, nos. 269-271). Of particular interest is no. 276, a sale of part of a house by a *chirograph*. Here the sellers agree ἐτι δὲ παρεξόμεθα ἑαυτοὺς ἀναφέροντας (σ)οι τῇ Ταμάρωνι πρᾶσιν τοῦ προκειμένου ἐβδόμου μέρους—διὰ τοῦ ἐν τῇ μητροπόλει μνημονείου ἐξαμαρτύρου ὁπότε ἡμεῖν συντάσση. The Μνημονεῖον ἐξαμαρτύριον is, in the first century, an office, separated from the ἀγορανομεῖον, dealing with the recording of ἐξαμαρτύροι-documents. The sellers promise to present themselves at any time to record for the buyer an ἐξαμαρτύρος document, evidently considered more valuable than a *χειρόγραφον*. The provisions recall those of BGU 260 (M. Chr. 137; cf. Wilken, *Archiv.* v, 20617, where the drawer of a *χειρόγραφον* also states (line 6): ὁπότε ἐάν αἰρῇ ἐκδώσω σοι ἐξαμαρτύρον ἀπ[ο]ρχήν. In no. 276 (line 24; cf. also line 30) the co-sellers agree: ἐτι δὲ παρέξομαι ἑμαυτόν, ὁπότε ἐάν συντάσση μοι, ἀναφέροντα σοι σὺν τοῖς προγεγραμμένοις πρᾶσιν τούτου δ[ι]’ ὧν ἐ[ἴ]ν βούλη ἀρχείων ἐπὶ τῆς μητροπόλεως. Since there existed in the metropolis, at this time, an ἀγορανομεῖον separate from the μνημονεῖον (cf. RE. xv, 2 p. 2264), the provision means that the co-seller will present himself for recording the sale either before the ἀγορανομεῖον or the μνημονεῖον whenever the buyer orders him. No. 303 is a subscription to a contract concerning cession of a *catoecic* allotment without ἀναγραφὴ. As the subscription without ἀναγραφὴ was not valid (cf. Boak, *loc. cit.* p. 10), the parties undertake "to draw up the customary contracts for the transfer and cession" through the *catoecic* office.

Nos. 310-316 are leases. In no. 312 the bailiff of an estate owned jointly by two Romans takes a lease on a private bath (cf. Taubenschlag, *op. cit.* p. 275) in his own name. It is the first case of in-



direct representation among the Romans (cf. *ibid.* p. 235).

Nos. 317-327 is a hybrid *divisio parentis inter liberos*. Although the division is to be made μετὰ τὴν τελευτήν, actually it is of immediate effect and transfers ownership. As in *divisio parentis inter liberos*, irrevocability is stressed and the parents reserve lifelong use for themselves (cf. *ibid.* p. 156). In other words, although the act is called a division μετὰ τὴν τελευτήν, it is actually a *divisio inter vivos*. No. 322 is of the same type as 321, but the phrase μετὰ τὴν τελευτήν is omitted. The contract confirms the dowry given the two daughters in previous alimentary contracts and, since the dowry has been paid in full, the daughters have no share in any property left by their parents on their death (cf. *ibid.* p. 140; see also nos. 341, 350). The other children and a grandson take immediate possession of the property, and are to be held responsible for any debts the parents have incurred and must provide them with a suitable funeral when they die (cf. *ibid.* p. 144). They are also charged with the support of their parents. Significant is the disposition by virtue of which a guardian has been appointed for the wife who lives in an ἀγρᾶφος γάμος with her husband. The provision originates in the fact that in such a marriage the husband does not become his wife's κύριος (cf. *ibid.* p. 87). The guardian is already acting in this agreement. Nos. 323-325 is a contract for the division among four brothers of four slaves inherited from their father. The services of two of the slaves have been reserved, in accordance with the terms of the father's will, for their mother during her life time (cf. *ibid.* p. 198). No. 326 is a *divisio hereditatis* among five brothers of property inherited from their parents. The eldest brother, by virtue of his seniority, received an extra allotment (cf. Kreller, *Erbrechtliche Untersuchungen*, p. 150; Taubenschlag, *op. cit.* p. 139). As was usual in divisions of property, *servitutes viae et aquae* were established (cf. Taubenschlag, *op. cit.* p. 194).

Nos. 328-335 are loans with or without credit. No. 328 is the typical form of Egyptian loan conceived as a conditioned sale (cf. *ibid.* p. 205), where the contract of loan and the contract of sale are separated and form two acts. It is significant that the dockets on the verso of 332 and 335 (*PSI* 911) call this act in Greek ὑποθήκαι (cf. Kenyon and Bell, *op. cit.* ii, p. 172, no. 358 (150 A.D.) γράμματα χειρογράφου πράσεως [καὶ ὑ]ποθήκης καὶ δ[αν]είου (cf. Taubenschlag, *op. cit.* p. 205),

since an adequate term in Greek is lacking. The term ὑποθήκη is right in so far as the *hypotheca* also creates a conditioned sale (cf. Mitteis, *op. cit.* p. 146), as does the Egyptian lien. On the verso of 328 is an annotation which probably means that the οἰκονομία of the lender has to be held until he receives something παρὰ τοῦ καταγεγραμμένου. The term καταγεγραμμένος refers to the buyer who held the contract of conditioned sale of the property (cf. Taubenschlag, *op. cit.* p. 244). The contract in nos. 333-334 has the provision that this loan is not to prejudice the claims of the borrower against the same parties, arising from a mortgage which he holds on some property of theirs and they are not to redeem this mortgage (ὁμολογία μεσιτείας) before they have repaid the loan.

Nos. 337-339 are receipts. No. 338 is unique, an acknowledgment by Ptolemios that he had received from the monographos of Tebtunis a deed of cession prepared through his agency for some other persons. The latter have conveyed some property to Ptolemaios whose name has been entered as that of the new owner in the land registry office and who, accordingly, is entitled to receive the deed from the vendors. No. 339 is a receipt for a part of a dowry. The husband acknowledges the receipt of an additional gift from his wife beyond the dowry and the *parapherna* (personal belongings) received previously when the alimentary contract was drawn up. The wife acts with a *tutor ad actum* because the ordinary *tutor*, her husband, is unable to act because of conflict of interests (cf. *ibid.* p. 131).

No. 340 is a property settlement after marriage in several contracts. The first contract is an ὁμολογία προσφορᾶς, or, perhaps, more fully an ὁμολογία προσδόσεως καὶ προσφορᾶς, that is, a settlement of property made under the titles of πρόσδοσις and προσφορά by the parent or parents of a wife to the husband (or to herself) in addition to the customary dowry (φερνή) and the bride's personal belongings (παράφερνα). The editors define it as a *donatio propter nuptias*. Usually, however, this term defines a gift from the husband to his wife and not conversely (cf. *ibid.* p. 96). No. 340, Col. III is a *transactio* (see also no. 345; cf. Taubenschlag, *op. cit.* p. 305) No. 343 is a matrimonial contract with hereditary provisions (cf. *ibid.* pp. 156 ff.)

No. 346, a *locatio conductio operis* with a weaver who undertakes to teach a slave girl the art of weaving during an apprenticeship of two and one-



half years, contains the following provision (line 9): ἐάν δὲ μὴ διδάξω ἢ διδάξας κρίνηται μὴ εἰδυῖα, ἐπ'ἀν'ανκον αὐτὴν ἐκδιδάξας τοῖς ἰδίοις μου ἀνηλώμασιν καθότι πρόκειται. The provision recalls that of Fuad 37 (48 A.D.), a contract of the same kind, where we read: τοῦτου δὲ πληρωθέντος ἐπιδειξομαι σοὶ αὐτὸν ἐπὶ ὁμοτέχνων τριῶν ὧν ἓν κοινῇ κτλ. and as the editor remarks, "habileté technique de Fucus sera prouvée dans une sorte de 'demonstration' qui aura lieu devant trois confrères que Lucius Pompeius et Ménodoros auront ensemble agréés." (cf. Taubenschlag, *op. cit.* p. 304). No. 348 is a contract of partnership; nos. 349 and 355 are *loc. cond. operarum* (cf. *ibid.* pp. 281 ff). In the former papyrus a slave is mentioned as a payer (cf. *ibid.* p. 67); in the latter a partial payment in advance is made. No. 351 is a contract by which an heir transfers the *hereditas* to another person (cf. *ibid.* pp. 162-63). In no. 352 two sisters, in return for a money consideration, relinquish their claims to certain property (κατοχή? cf. *ibid.* p. 158), given as a marriage portion to a third sister by their mother; nos. 353 and 354 are guarantees of immunity of a kind not encountered previously (cf. *ibid.* p. 312). In the former, a person agrees to protect the nomographos of Tebtunis against any penalties he may incur for having issued to him without the proper warrant of contract of cession prepared for his father; in the latter, immunity is guaranteed to the nomographos probably for having prepared and registered a contract of sale without having the customary authorization (ἐπίσταλμα), usually procured from the bureau of registration on the initiative of the property owners.

This short review gives only a poor idea of the rich contents of this volume of Michigan Papyri. The publication is accomplished with the same skill, knowledge, and mastery which characterizes all editions of Boak and his collaborators and is beyond any doubt one of the most important and most valuable, if not the most important and valuable, of the last decennium.

COLUMBIA UNIVERSITY RAFAEL TAUBENSCHLAG

ROMANO CAMPANIAN MYTHOLOGICAL LANDSCAPE PAINTING, by C. M. Dawson, Yale Classical Studies, Volume 9. Pp. xvi + 233, pls. 25. Yale University Press, New Haven, 1944. \$3.00.

It is a pleasure to welcome another champion of the independence of Roman art, and to find such well documented evidence for conclusions

some of which one had already reached oneself. It is indeed no longer possible to dismiss Roman achievement in the field as childish, as Percy Gardner did in attempting to refute Wickhoff. Pompeian painting is a Roman, or at least an Italian achievement, and while inheriting its techniques from the Greeks, adapted them in such a way as to establish a new art—the decoration of the Roman house.

Professor Dawson advances the thesis that the Romans, whose painting was "characterized by an unprecedented interest in problems of spatial extension, found it not unnatural to extend this interest to the representation of landscape and to seek to render more real that which had remained largely symbolic in Greek and Hellenistic art." The same interest in the natural world appears in Ovid's myths. At the same time a developed pantomime and ballet favored elaborate landscape setting. This scenery and the legends popular with Ovid and the drama are "just those elements chosen for representation in the mythological landscape paintings."

Beginning with a review of landscape and space in Greek and Hellenistic art, including relief sculpture, the author comes to the conclusion that landscape for its own sake is not to be found before the first century B.C. When he examines the scanty records of Roman art and the actual remains, he finds a different story. Out of the Italian version of the Hellenistic "masonry style," an architectural style was created which laid emphasis on spatial recession, an idea alien to Greece. With this decoration appeared a strong interest in landscape with or without staffage figures. There follows a catalogue of seventy-six Romano-Campanian mythological landscape paintings from the third and fourth styles, which are analyzed by subject and by composition. In some cases the artist used groups from traditional compositions dating back even to the seventh century. But "in all cases, whatever the origin of the component parts, the figure groups have been placed in landscapes which are without parallel till they appear in the Romano Campanian art" of the first century B.C. After examining the relationship of the mythological landscapes to the theatrical performances of the early Empire, the author takes up the problems of perspective, staffage figures, and continuous narrative in the landscapes. He remarks, in commenting on the extraordinary command of perspective, upon the divergence of the horizon level in the paintings which



show both a high horizon and also a form of bird's eye perspective. The author attributes, as did Rodenwaldt, the lively staffage figures to Italian influence, and concludes with an examination of the continuous narrative method, which he claims is Roman and was transmitted to the mediaeval Italians.

With much in these conclusions one can thoroughly agree. It is perfectly true that the Romans both in architecture and painting were original in exploiting the suggestion of space in a way that the Greeks never achieved, it is true also that the Romans succeeded in attaining a sense of spatial unity within the picture. I am ready also to concede to the Romans their own form of continuous narrative. Where I would part company with Dawson is in the sharpness with which he denies to the Greeks any share in the matter of landscape, for the Romans, in fact, could not have achieved this development of their art, had not the work of the pioneer mapmakers like Demetrios and of the scene painters in particular been there to guide them. It is more than doubtful, for example, whether without this work the Romans could have had at their disposal in the first century such landscape pieces as the *Odyssey* ones in the Vatican. On these landscapes, theatrical in origin, the names of the characters as well as at least one indication of locality are written not in Latin, but in Greek. The reason for this is clear, as I have shown elsewhere. Just as landscape is already present in sculpture in the *Telephus* frieze, is present in the Nile scenes of the Palestrina mosaic dating from the time of Sulla, so during the Hellenistic period spatial indication in painting did occupy the Greeks, particularly in the satyric type of scene painting. Even in the field of house decoration it had just begun timidly to invade the Delian walls. It took the Romans, however, to incorporate boldly the suggestion of space in the domestic decorative scheme and in the composition of the individual wall painting. While Dawson rightly refers to the close parallel between the mythological landscapes and the theatrical performances of imperial times, he does less than justice to the theatrical influences which stemmed from the Hellenistic world and set the pattern which the Romans developed. He underestimates the achievement of the Hellenistic scene painters to whom Vitruvius acknowledges a debt which has been substantiated since by the work of Bieber, Bulle, Fiechter, Beyen and myself. He thus misses the true explanation of why landscape was only

gradually developed in Roman hands. It had to emancipate itself from stage scenery. It had to fuse the varying perspectives of scene painter and mapmaker, a process reflected in the range of perspective to which Dawson refers. He need not be afraid that in conceding to the Hellenistic artists their due he will weaken his case for the originality of Roman art. Such a concession serves to fill in the lacunae of his own account. Some of the evidence of this process he will find in an article in this issue of the *JOURNAL*. I would refer him also to my earlier articles, which he does not seem to have encountered in his reading.

WASHINGTON, D. C.

ALAN M. G. LITTLE

GREEK PAINTING; THE DEVELOPMENT OF PICTORIAL REPRESENTATION FROM ARCHAIC TO GRAECO-ROMAN TIMES, by Gisela M. A. Richter. Pp. 24, pls. 20 and frontispiece. New York, The Metropolitan Museum of Art, 1944.

Miss Richter's brochure on Greek painting serves admirably well the double purpose for which it is intended. In format delightful for the eyes to behold and the hand to turn, it is both an introduction for those who seek to be initiated into the mysteries of an art still wonderfully fresh and at the same time focuses attention upon one of the chief problems of that art, a problem which the Greeks never mastered. One can imagine that many visitors to the Metropolitan, both young and old, will keep this little book by them to whet their interest and move them to further study. It does both.

The problem around which this review of the development of Greek painting is built is that of the "birth and growth of three-dimensional representation before the Graeco-Roman period." Illustrated step by step by examples from Greek vases and murals in the Museum, the story begins with the two dimensional compositions of Egyptian and Minoan art. In the painted relief from Kaw el Kebir of the Eighteenth dynasty and in the boar hunt from Mycenae the artist presents a flat design without any feeling of depth. In the Greek geometric and archaic periods the same idea persists. The figures are pieced together from full front or profile parts. But in the sixth century experiment with depth begins. In the Panathenaic amphora (acc. no. 14. 130. 12), the curving surface emphasizes the movement of the runners; the rear figures show the alignment in depth. The figure of the wounded Amazon by the Berlin Painter (about 500 B.C.), (acc. no. 10. 210. 19), shows well



the difficulties of the painter of the time in depicting a crumpling body. After the human body came attempts at landscape. Spatial depth was now indicated by drawing figures which were further away on a higher level. By about 460 B.C. foreshortening had become general, though as in the battle of the Lapiths and Centaurs (acc. no. 07. 286. 86) not always successful. An interesting experiment is seen in the red-figured oinochoe of about 425 B.C. (acc. no. 37. 11. 19), where the doorway and tiled roof of the background are shown receding, though the convergence of parallel lines is not understood. The same failure persists in the interior scenes illustrated from a big South Italian water jar of the fourth century (acc. no. 06. 1021. 227). While in the Hellenistic period appreciation is shown in rendering the volume of figures, and modeling is conveyed by planes and shadows, figures like that of the kitharist and child from the Boscoreale villa are not co-ordinated, and in the scene painting used in this house the recession of buildings is carried out unsystematically.

In the introduction the historical tradition of the lost major art of mural painting is brought into relation with the illustrations drawn from the minor art of the vases. It was Kimon of Kleonai who developed foreshortening; Polygnotos who tackled the setting of figures in depth; Agatharchos who theorized on the perspective of scene painting. Nikias and Apelles, we are told, made figures "stand out from their background." The art of portraiture developed in the hands of great masters, as we can tell through their reflection in the mummy portraits of the Fayûm.

Miss Richter rightly emphasizes the fact that ancient Greek perspective was not complete. The space of the picture was not yet realized as a unity. The explanation is perhaps to be sought in the reliance of the Greeks on scenic perspective, which is not always correct and which in the panel stage of the Greeks was limited to sections. But it must not be forgotten that the Greek mapmakers did attempt a kind of aerial perspective as seen in the Paestrum mosaic and that the Romans, continuing where the Greeks left off, did achieve at least an approach to the modern landscape.

WASHINGTON, D. C.

ALAN M. G. LITTLE

MEMORIAS DE LOS MUSEOS ARQUEOLÓGICOS PROVINCIALES, 1940, published by the *Spanish National Ministry of Education*, (Dirección General de Bellas Artes). Pp. 116, pls. 41, figs. 14. S. A. Aldus, Madrid, 1941.

Even while the great wave of cultural retrogression and destruction was sweeping through most of the battle torn countries of Europe, Spain was weathering her phase of civil disintegration and entered a period of energetic reorganization. Most of the local museums of the country had for many years been heavily handicapped by lack of funds, staff, and ambition. The recent civil war had aggravated their condition and brought most of them to a complete standstill. The present publication is the record of their rescue and resuscitation, and reads encouragingly against the general gloomy background in other lands. That this is the first time that such a report has been published by the Spanish government is most easily explicable on the hypothesis that this was the first year during which such a report would have been worth making. This one was not merely worth printing for administrative reasons, but is worth reading by the professional student for its content. The central National Archaeological Museum in Madrid is deliberately excluded from the survey; of the 24 provincial museums nearly all present reports indicative of new life, while some have displayed an almost startling activity. Though it is often taken for granted elsewhere as routine museum procedure, those who remember Spanish provincial conditions will know how to appreciate and applaud the energy newly devoted to constructing or amending catalogs and inventories, to installing and rearranging exhibits, and to making generally available and comprehensible the hitherto inaccessible and unidentified.

Barcelona, always in the front, has inaugurated eight new rooms for its prehistoric material, building the display cases directly into the walls with exterior spot-illumination and reconstructing "diorama" settings for group finds and other special objects. Much of the Greek (Ampurias) and Roman (Badalona) material has been rearranged and the Iberian material taken in hand for similar overhauling, restoration, and exhibition. The well preserved mosaic of Iphigeneia's sacrifice has been moved from Ampurias; and there is new material from an important excavational campaign on that site, now officially annexed to the direction of the Barcelona museum.

The director of the archaeological museum in Cordova complains that even his fellow citizens seem never to have heard of the collection which he administers. With continued encouragement, financial and administrative, a change may be anticipated.



The Granada museum has purchased and put on display 20 of the bronze Iberian figurines from Santa Elena (Jaen).

Tarragona has perfected interesting and attractive plans for incorporating the Roman structure called indifferently and equally erroneously Augustus' Palace and Pilate's Tower, by converting it from a prison into one element of a new archaeological museum to be constructed along the adjoining Plaza del Rey.

Toledo, with much damage to repair, has put its battered house in order.

At Valladolid the magnificent plateresque patio of the Colegio de Santa Cruz has been restored under auspices of the University and its topmost floor has been spaciouly and elegantly adapted to the archaeological collection, now officially incorporated in the University.

It will be interesting to learn the further changes and advances effectuated throughout the provinces during the four years which have elapsed since the appearance of this impressive record of energetic well-directed effort in the cause of Spanish antiquities and museum administration.

BRYN MAWR COLLEGE

RHYS CARPENTER

MEMORIAS DE LOS MUSEOS ARQUEOLÓGICOS PROVINCIALES, 1942 (Extractos), published by the *Ministerio de Educación Nacional, Dirección General de Bellas Artes, Cuerpo Facultativo de Archiveros, Bibliotecarios y Arqueólogos, Inspección general de Museos Arqueológicos*. Aldus, S. A., Madrid, 1943. Pp. 252, pls. LXXVII.

This volume is an administrative report on the activities of the Spanish Archaeological Museums outside the capital, Madrid; they are those of the Alhambra (Granada), Ampurias (Gerona), Badajoz, Balaguer (Villanueva y Geltru, Barcelona), Manresa (Barcelona), Barcelona, Burgos, Cádiz, Carmona (Seville), Córdoba, Gerona, Granada, Huesca, Ibiza, León, Mérida (Badajoz), Murcia, Orense, Palencia, Seville, Museo Numantino of Soria, Museo Celtibérico of Soria, Tarragona (*Museo Arqueológico* and *Museo Paleocristiano*), Toledo and Valladolid. Although not all of these Museums are very rich, still this simple enumeration can give an idea of the importance of archaeology in Spain (Portugal is not included, of course).

The report contains a great deal of material related to the administration of the museum which is of little importance for foreign archaeolo-

gists, but pages 47 to 223 contain, among other material, and unfortunately in a very wordy style, practically complete information on the archaeological discoveries of recent years as well as on repairs, improvements and changes of location of older objects; the most important objects and monuments are reproduced in the plates at the end of the volume. There we can see Roman mosaics, excavations, oriental vases (Syrian, Egyptian, Graeco-Phoenician), a relief with Ceres and Proserpine (from El Guijo, Córdoba), Visigothic capitals, coins, a Graeco-Roman statuette of Mercury, pagan altars, Roman lamps, prehistoric arrow-points, axes, halberds and statuettes of the Argar-type, a statue of Trajan and a beautiful Venus (both from Italica), Graeco-Roman torsos, a colossal statue (of Hadrian), beautiful Hispanic reliefs and altars, several statues and heads of Roman emperors, etc. There are also several Christian and Arabic objects.

The volume contains one Hebrew and several Latin inscriptions, most of them new. Since even those which were published before appeared in Spain, and since Spanish publications are in general not easily accessible to American scholars (and even less so now), it may be useful to the readers of the *AJA.* to have them reproduced here. I give for each inscription the indication of the page of the volume and of the plate (when there is one).

P. 71: a little figure of a male goat found near Cáceres, 122 mm. high, leans its forepaws on a plaque bearing the following inscription:

D · S · T · A D  
V I C T O R I N  
S E R · C · S E  
V E R A E  
A · L · V · S

which Padre Fita reads: *D(eae) S(anctae) T(uribrigensi) AD(aeginae) VICTORIN(a) SER(va) C(orneliae) SEVERAE A(nimo) L(ibens) V(otum) S(olvit)*. On the Celtic goddess *Ataecina* or *Adaegina* see p. 116 and *RE.* s.v. *Ataecina*; *Emerita* 3, 1935, pp. 214 ff.

P. 143: the Roman votive inscription of El Bierzo (León) found in 1934 (now in the Museum of León); cf. plate XLI; it looks like the front of a temple: 1, 45 m. long, 0, 70 m. wide, 0, 015 (!) thick: beautiful letters 37 mm. high:

I V L I A N O H E T C R I S P I N O C O S  
P R I · I D V S F E B R V A R I A S · A E  
M I L I V S



CILIMEDVS · L · P · PRO · SALV  
TESVAET  
SVORVM [D] IE IOVIS.

that is: "Under the consulate of Julian, (consul) for the second time, and of Crispinus, the day before the Ides of February, Aemilius Cilimedes voluntarily set up (this monument) for his own health and for that of his family, the day of Jupiter." The date is February 12, 224, the year in which Appius Claudius Julian was consul the second time, with Gaius Brutius Crispinus. A curious detail is that February 12, 224 was not a Thursday, but a Friday; the explanation suggested is that the inscription was dedicated after sunset, late in the evening or in the night; the Spaniards in this period started the new day with sunset, as the Celts, the early Christians and the Jews used to do.

Under the inscription, to the right, we see a flourishing little tree, with the word LAPAT (VS) "sorrel."

P. 144: a Hebrew inscription of the year 862 (1102 A.D.) is published, but only in translation. It was found in Castro de los Judíos in the city of León in 1942:

"This is the sepulchre of Mar Isaac, son of Mar Samuel, nephew of Saray Namamed [sic.] 27 years old, who died the 25 of the month Eliub [Aug.-Sept.] of the year 862 (1102), according to the computation of the city of León. (The passage Isaias 26, 19 follows)."<sup>1</sup>

Another more recent inscription (to judge by the writing) appears on the other side of the same stone; but is not so well written and not so well preserved, so that neither the text nor the translation is given. The Museum of León owns four more Hebrew inscriptions. One of these is, I think, the tombstone of Yahya, who died on the 15th of Kislew 4860 (Nov. 18, 1100), the oldest Hebrew inscription in Spain, also found in Fuente del Castro, the ancient *Castrum Iudacorum* at León; cf. *Jewish Encyclopaedia*, s.v. *Leon*, p. 683. It is, as can be seen, only two years older than the present one I transcribe.

P. 149: a Roman funerary cippus of marble,

<sup>1</sup> The date 862, "according to the computation of the city of León" looks rather puzzling, since we are not aware of such an era. On the other hand, the number 862 corresponds to the so-called "minor reckoning" of the Jewish Era, in which the thousands are dropped: 1102 A.D. is 4862 from the Creation.

*Eliub* is of course a misprint for *Eliel*.

found at Mérida (ancient *Emerita*), size: 1.10 m. high, 0.70 wide, 0.38 thick; cf. plates XLII and XLIII:

D · M · S ·  
G · VALERIVS · SOLDVS  
VETER · LEG · VII · GE  
ANN · LXX  
L · DOMITIVS · APONIVS · ET  
VALERIA · PRIMVLA ·  
HEREDES  
EX · TESTAMENTO · F · C ·  
H · S · E · S · T · T · L ·

(hic situs est sit terra tibi levis). That is: "Lucius Domitius Aponius and Valeria Primula, heirs of G. Valerius Soldus, a Veteran of the Legion VII Gemina, 70 years old, had this (monument) made according to the testament. He is buried here; may the earth be light on you." Notice the vulgar form *Soldus* for *Solidus* (Span. *sueldo*, Ital. *soldo* etc.).

P. 154: fibula preserved in the Museum of Murcia, has an inscription of difficult reading (*Aucisus?*), cf. plate XLVIII, 29.

P. 155: another fibula in the same Museum, bearing the inscription VRNACOS.

P. 186: an altar from Yanguas ("Temple of San Pedro"), where it was used as construction material now preserved in the Museo Celtibérico in Soria (51 cm. x 38 x 29); cf. plate LVIII, 1:

COR · CELSVS  
ET · CASSIA  
MATERNA  
MATRIBVS

"Cornelius Celsus and Cassia Materna to the Mothers." Another instance of the important cult of the Mothers, well known in Gaul, Germany and Britain, and probably Celtic. Cf. e.g. *CIL.*, ii, 2764; 2776; 2128; 2828; 5413; see *RE.* s.v. *Matres* and Philippon, *Germanic Review* 19, 1944, pp. 81 ff.

P. 187: another altar, found in the same place and also preserved in the Museo Celtibérico of Soria; the left part is lacking. Size 30 cm. wide and 25 thick. The letters are 45 mm. high; cf. pl. LVIII, 3:

----- POMPEI · CAA  
----- RINPOMPEI  
----- FLAC F NEM  
----- NTINA ATEM  
----- NINEVSLM

The altar seems to have been dedicated by



some members of the family Pompeia. In the fourth line I would read (*Vale*)*ntina* (cf. the following inscription). A *Flac(ci) f(ilius)* seems to be mentioned, and perhaps a (*Ca*)*rin(us)* and a *Cla(rus)*. The end is the usual formula *u(otum) soluerunt l(ibens) m(erito)*.

P. 187: funerary inscription, found in the same place as the preceding, also preserved in the Museo Celtibérico; size 99 cm. x 36 x 18; the letters are of an average height of 6 cm.; cf. pl. LVIII, 2:

MINICI  
AVALIN  
TINA  
VXSOR  
TITINIH  
SEP IIST  
AN XXV

The letters are rather archaic. I see no reason to believe, as the editor does, that *Titinus* (I would rather say *Titinius*) is an Hispanic indigenous name.<sup>2</sup> The translation is easy: "Minicia Valentina, the wife of Titinius, is buried here, 25 years old." HSE P stands for *h(ic) sep(ulta)*, of course. Notice the form of the *a* (Λ) and of the *e* (II), both frequent in this region; cf. the preceding inscriptions and those which I published in the *AJA*. 45, 1941, pp. 73 ff.

P. 195: altar from the road of Valls and Francolí, now in the Museum of Tarragona. Size: 0.48 m. x 0.31 x 0.26; the height of the letters is between 21 and 30 mm.; cf. plate LX, 1:

SILVANIS  
AEMILIVS  
ADELPHVS  
V · S · L · M ·

"Aemilius Adelphus (dedicated) to the Silvans" and the usual *v(otum) s(oluit) l(ibens) m(erito)*. Like Pan and Faunus, *Silvanus* also converted into a whole class, the *Silvani*. Cf. also *CIL*. ii, 4499.

P. 197: in the theatre of Tarragona a big block was found (1.90 m. x 0.64 x 0.54) with the words IMP · CAES — — in beautiful letters of the second century, 18 cm. high. Cf. pl. LXI, 1. It is now in the Museum of Tarragona.

P. 201: altar of white marble, size 0.90 m. x 0.45 x 0.45, now in the Museum of Tarragona; pl. LXIV; bears the inscription

NVMINI  
AVGVST

<sup>2</sup> It was a very old Roman name, see *RE*. s.v.

P. 202: a large piece of architrave bears the imperial inscription usual in theaters: we only read the letters POTES, probably *tribunicia potes(tate)*.

Two other fragments have the words EMILI and

LICI (nius?)  
AVGVST

The plates at the end of the volume present six more inscriptions not studied in the text. Three of them are funerary stelae preserved in the Colección Municipal of Seville (pl. LVII):

a) FAVSTINVS · VER  
NA · ANN · III · H · S · EST  
SEMPRONIVS · FAVSTVS  
(under the figure of a child).  
b) IVVENTIA · VRBICA  
ANN · XXI · H · S · E · S · T · T · L ·  
IVVENTIA PRIMVLA  
FILIAE P(?)F (?)

"Iuuentia Vrbica ann(or)um XXI h(ic) s(ita) e(st) s(it) t(ibi) t(erra) l(evis). Iuuentia Primula filiae p(ientissimae) f(ecit)." (under the bust of a woman).

c) ANTIOPA  
DIOCHARISI  
AN · I · H · S · E · S · T · T · L ·  
(under the figure of a wheel).

"Antiope Diocharisi an(nor)um I h(ic) s(epulta) e(st) s(it) t(ibi) t(erra) l(evis)."

A fragment of an inscription was found near San Rafael (Tarragona); cf. pl. LX, 2:

— — — MEDES (Nicomedes? Archimedes?)  
— — — ISRELIO (is reliquis?)

Of the third line only the tops of three letters appear, which I cannot read well. The form of the letters seems to be of the second century at the earliest (see Cagnat, pls. x; XII).

Two more inscriptions of a few letters appear on a little bronze horse of Hispano-Roman art, coming from Caravaca (Murcia); cf. pl. LXVII. It is an ex-voto of 56 x 35 mm. size. The text, p. 213, says the inscriptions are "Romanized" (romanizadas). I do not dare to attempt a reading.

PRINCETON UNIVERSITY G. BONFANTE

FROM CAVE DWELLING TO MOUNT OLYMPUS,  
by Edgar L. Hewett. Pp. 143. Man in the  
Pageant of the Ages, The University of New  
Mexico Press, Albuquerque, 1943. \$1.50.



This small book is the first in a series to be published under the general title of *Man in The Pageant of The Ages* by The University of New Mexico Press. Rather than presenting a factual outline of man's history from early times, as the name of the book might suggest, Dr. Hewett has collected in this volume six essays which are in essence his observations and conclusions concerning nature and man. Four of the selections were originally given as addresses. The repetitions—of which there are a fair number—and the contradictions which the reader encounters are acknowledged by Hewett in his introduction, but are defended on the ground that repetition can do no harm and that the author has never renounced the good explorer's right to change his mind.

The central theme of Hewett's philosophy of man recurs many times throughout the book and serves as a common tie for all the essays. This is the belief that man, and man alone, has always had an inherent drive for freedom. Eventually this drive will lead to a spiritual attainment of the highest level by all humanity. Until now this has been reached by only a few great men such as Jesus, Confucius, Plato and one or two others, but it remains man's great hope.

Although the United States was not at war when Hewett wrote these essays, his concern with the possibility and perhaps necessity of involvement in the world conflict and with the meaning of the disasters in Asia and Europe seems to have prompted some of his writing. Often he points out the grave situation of the world and the dangers of totalitarianism, but even more often he returns to his statement that although man's quest for freedom may receive temporary setbacks, it will never be permanently halted. Man's drive for freedom is an immutable law of nature.

In his first essay, *What is Man*, the author rejects as inadequate the answer that man is a reasoning animal on the ground that reason is not yet a constant attribute of the species—witness, for example, the apotheosis of Napoleon and other war lords. His own answer is: "Man, the only being that has power to evolve by self-volition; the only creature that has control over both heredity and environment." In the light of this definition Hewett examines in the five other essays the past of mankind, its wars and the causes for them, its steps towards freedom, and also the current needs of education and place in it

of the Social Sciences. He makes a plea for man to create of himself the ideal man, and suggests a way of education which will help achieve this aim. Anthropology has not yet marked out its boundaries. This it should do, leaving the study of man as an animal to the biologist and taking for its own province man, the creator, in his unique and essentially human dimension.

WASHINGTON, D. C. KATHERINE MCCLELLAN

MISSION MONUMENTS OF NEW MEXICO, by *Edgar L. Hewett* and *Reginald Fisher*. Pp. 269. Handbooks of Archaeological History. The University of New Mexico Press, Albuquerque, 1943. \$4.00.

The purpose of this book, as stated in the foreword, is "to bring the majestic old Missions of New Mexico to life in the light of their whole history." Consequently the first portion of the book is devoted to brief sketches of Italy and the American Southwest in the thirteenth century. These are followed by a detailed account of the life of St. Francis of Assisi and the orders founded by him. The widespread missionary activity of the Friars Minor is traced to the New World, and attention is finally focused on the particular struggle to establish the faith in New Mexico. Dr. Fisher reviews the careers of the early Franciscans, their hardships and martyrdoms, and their successes and failures in founding missions, in dealing with the Indians, in organizing a supply system, and in treating with the Spanish Colonial government. In less than a hundred years the Custody of the Conversion of San Pablo rose to its zenith and fell, crushed by the Indian Rebellion of 1680. Actually the real struggle for the faith had been neither with the Indians nor the wilderness but with a "weakness of the flesh" which resulted in continuous conflict between the secular and religious parties in New Mexico. The Franciscans returned after the Spanish reoccupation of 1693 and have continued in New Mexico through many vicissitudes until their present strength is greater than ever. Pertaining to the above section of the book are the first four Appendices which are, respectively, a Roll Call of the Martyrs, the Custodians from 1617 to 1680, a list of Franciscans who labored in the founding of the New Mexican Church, and a list of Franciscans in New Mexico, January, 1942. Appendix Five consists of a selected bibliography for the entire book.

Following the historical survey are descriptions



of a representative group of fourteen Franciscan churches built at various pueblos. Most of the churches in this group are still in use. A brief paragraph about each includes directions for finding the church, a short history of it, and a description of the manner in which the Feast Day of the patron saint is celebrated. Paintings of these churches by Carlos Viera in the Palace of the Governors at Santa Fe illustrate the text.

The remainder of the book deals with what Dr. Hewett calls the "archaic" missions, consisting of the ruined churches at Pecos, Quarai, Abó, Gran Quivira and Jemez, and the still surviving church at Ácoma. Each monument is described in detail, and an account is given of the history of the pueblo to which it belongs. In presenting the Pecos mission Hewett quotes liberally from his *Ancient Life in the American Southwest* and from *Landmarks of New Mexico* (Hewett and Mauzy), as well as from other writers. Abridged versions of articles by Paul A. F. Walter describe Quarai, Abó, Tabirá (now known as Gran Quivira), and Jemez, while Lummis' "The City of the Sky" from *The Land of Poco Tiempo* is drawn upon for Ácoma. Each ruin is illustrated by photographs which were taken in most cases before any repair work was done.

The final chapter tells of the acquisition of the Palace of the Governors in Santa Fe by the School of American Research and its establishment as a center for historical and archaeological studies and as a museum for the commonwealth of New Mexico. This paved the way for the subsequent acquirement of the five "archaic" ruined churches as state monuments. Their administration was put in the hands of the School and Museum. At first lack of funds prevented more than temporary checking of decay, but in 1934 Federal aid enabled the start of a program of permanent reclamation and stabilization. In this the School's policy to preserve only what remains of the ruins and to make no attempt at restoration has been kept firmly in mind. Dr. Hewett has been in charge of the program, but the details of construction and supervision have fallen largely to Dr. Fisher. For a description of the excavation and repair of each monument the authors have given abridged reports of the men in charge at each site. Photographs of the repair work are included in this section. It is the authors' hope that the ruins which they have described will be held in proper veneration by all who visit them.

WASHINGTON, D. C. KATHERINE MCCLELLAN

CERAMIC SEQUENCES AT TRES ZAPOTES, VERA CRUZ, MEXICO by Philip Drucker. Pp. ix + 155, pls. 65 figs. 46. Smithsonian Institution, Bureau of American Ethnology, Bulletin 140, 1943, Washington. \$.50.

An important Middle American archaeological problem is that of relations—especially temporal relations—between early Maya sites and those of the La Venta or "Olmec" culture. Knowledge of the latter has been vastly augmented by excavations in recent years, under Stirling for the Smithsonian Institution and National Geographic Society. One of the most interesting of the La Venta sites is Tres Zapotes, in the lowlands near the gulf coast, because there Stela C has been claimed to record a contemporary Mayan date, earlier than any in the Maya area proper, an interpretation which has been disputed.

This is a full report and analysis of pottery, figurines and miscellaneous baked clay objects encountered in a 1940 campaign conducted by the author to work out the ceramic stratigraphy of the site. Three local phases, Lower, Middle and Upper, were worked out. The report comes after one for the same site by Weiant (Bulletin 139 in the same series) which dealt with the ceramics of the preceding season, and without the same degree of specific excavation for stratification. A very important difference is that Weiant's material did not include any of that now assigned the earliest place; while evidence seems now to indicate that his "Upper Tres Zapotes" includes a complex, now called "Soncuatla," which is intrusive, and properly styled "post-Tres Zapotes." Confirmation by stratification of Weiant's division into Middle phases A and B was not obtained, but it is not considered certain that they are thus invalidated.

A general reader, interested in conclusions, will wonder to which report he should turn, and Drucker gives a quotable answer: "Our respective views as to relationships, based on typological similarities, are not very close, but these are matters of opinion. . . . Likely neither of us is altogether wrong—or altogether right."

Drucker considers that his stratigraphic analysis shows a cultural continuum from Lower through Middle to Upper Tres Zapotes phases, with a time-gap between the last and the Soncuatla period. Lower Tres Zapotes is characterized by monochrome (possibly exclusively monochrome) pottery and two types of hand-made figurines. These latter are of the general sort



which used to be called "archaic". Middle Tres Zapotes is a phase of elaboration, with polychrome pottery and additional types of hand-made figurines including bearded ones. In the Upper Tres Zapotes phase Middle phase pottery types persist, as do hand-made figurines, but there is an influx of new elements which lack local prototypes. These include incensarios, a vessel provisionally identified as a *comal* (tortilla griddle), slab legs, bottomless vessels ("drums"), "candaleros," carved and probably lost-color (negative painted) decoration, and mold-made San Marcos type figurines. The final Soncuatla complex is described as completely new here, without direct links to the Tres Zapotes phases.

Reasoning from the innovations of Upper Tres Zapotes, that phase is equated in time with the great Mexican highland site, Teotihuacan, particularly the later phases there, while complete absence of plumbate and fine orange seems to close it before the period called "Mexican" at the Maya site, Chichen Itza. The Lower Phase was found sealed off from the Middle and Upper by a deposit of partly consolidated volcanic ash. A question of prime importance is, how early is this phase relative to the earliest ceramics of the Maya area to the east and south? Apparently the answer is that lower Tres Zapotes belongs on the same general time horizon, the typological similarities, in the author's view, being with Mamón and Chicanel ceramic periods at Uaxactun, with Period I at San José (Maya "Old Empire" sites) and with Playa de los Muertos in Honduras. Further, the early complex seems to fit into an early lowland rather than early highland pattern. Such early beginnings here, as elsewhere, fail to take us behind a time of well-developed pottery techniques; and they do not of themselves, in view of the long occupation, prove much with respect to the age of the famous sculptures here.

It is not as easy as one might suppose to find an indubitable temporal association of a large monument and a pottery complex. Stirling has argued that the limited archaeological evidence points to the Lower and Middle periods for the large monument, but conceded that they could not be related to Drucker's ceramic column in a satisfactory manner (Bulletin 138 in this series). Drucker does not discuss this problem in detail, but notes the absence of association with the important Stela C, with its claimed 7.16.6.16.18 date. But he contributes a very interesting bit of evidence bearing on the question. A bar-and-dot numeral

was found carved in the country rock, below three feet of water even in an abnormally low dry season. This fact leads him to conclude that it must have been carved during the lower sub-ash period, through which the arroyo has cut. He is fully aware of the necessity for corroborative evidence—but if he is right, one may hope for other stone-carved and hence surviving numbers definitely establishing the use of a calendar in the Early ceramic phase, independently of whether the time-count corresponded precisely with the Maya system or not, and of readings and their "contemporaneous" nature on particular monuments.

The report is admirably put together for ready reference and shows that the job was well planned and carried out. Preliminary sections orient one in the local geography and at the site and describe the deposits and the trenches cut in them. Each type of pot, figurine or other object is described in turn, with separate sections on Stratigraphy, Ware Associations, Characteristics of the Ceramic Periods, and Chronology. There are a bibliography, full captions for the many plates and line-drawing text figures, an appendix on Burials, another of tables showing type distributions in the various trenches, and an Index.

LINTON SATTERTHWAITE, JR.  
UNIVERSITY MUSEUM, PHILADELPHIA

VERA HISTORIA Y DESCRIPCIÓN DE UN PAÍS DE LAS SALVAGES DESNUDAS FEROCES GENTES DEVORADORAS DE HOMBRES SITUADO EN EL NUEVO MUNDO AMERICA, by Staden Juan—TRADUCCIÓN Y COMMENTARIOS DE Edmundo Wernicke. pp. 171. Universidad nacional de Buenos Aires. Facultad de filosofía y letras. Museo etnográfico. Biblioteca de fuentes, 1. Buenos Aires, 1944.

The "true story and description of a country of wild, naked and cruel cannibals" published by the German landsknecht Hans Staden in 1557 is, undoubtedly, one of our best sources on early Brazilian ethnology and is justly famous. This soldier of fortune in the service of Portugal was made a prisoner of the Tupinamba Indians of the region of Rio de Janeiro and would have been eaten by them if his reddish beard had not aroused some doubts as to his racial affinities. The Indians who were always eager to devour the Portuguese who were their bitter enemies, felt more lenient toward other Europeans. Staden, therefore, did his very best to persuade them that he was a Frenchman, and, as such, a friend and an ally of the Tupi-



namba of the bay of Rio de Janeiro. For a whole year Staden was alternately threatened with death and treated in a friendly manner according to the hesitations of the Indians. He bettered his position by unwittingly convincing the Indians that he was a shaman. Finally he was claimed as a fellow countryman by some kindly hearted Normans and thus was returned to his beloved Germany where he wrote an account of his sorrows and adventures.

Hans Staden was a more intelligent and cultivated man than his famous countryman Ulrich Schmidl. He was besides a good and honest observer. His descriptions of the life of the Tupinamba are remarkably full and accurate. His style is simple and clear. His book is divided into two parts, one in which he tells us of his travels and captivity, and the other which he dedicates to anthropology and natural sciences. The chapters on ritual cannibalism are of particular interest. The wealth of details shows how close poor Staden came to be barbecued or boiled. The value of this document is enhanced by illustrations which give us a vivid and accurate picture of Tupinamba life. There is no doubt that these drawings were made under his direction when his memory was still fresh, for many objects not described in the text are nevertheless faithfully reproduced. It suffices to compare them to similar objects used by modern Indians to appreciate the scrupulous mind of this landsknecht.

The present translation has been made by a German scholar in the Argentine, Edmundo Wernicke, who is a specialist in germanic philology. It is as scientific and precise a translation as the one he published in 1938 of Ulrich Schmidl's famous diary. The Facultad de filosofía y letras and the Museo etnográfico under whose auspices this work was prepared must be commended for giving to the Spanish speaking public such an important source. It is the first volume of a series called "Biblioteca de fuentes." May more editions of this quality appear within the near future.

SMITHSONIAN INSTITUTION    ALFRED MÉTRAUX  
WASHINGTON, D. C.

**RACIAL PREHISTORY IN THE SOUTHWEST AND THE HAWIKUH ZUNIS**, by *Carl C. Seltzer*. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Vol. XXIII, No. 1. Pp. vii + 37; tables 15, Cambridge, Massachusetts, 1944. \$75.

Since the 1890's the cultural prehistory of the Pueblo Indians has attracted wider attention than

that of any other area in the United States. This resulted partly from an interest in the geographic setting and in Pueblo and Navajo religious ceremonial and art. But the care of southwestern archaeologists in setting up stratigraphic and typologic culture correlations, in using exhaustive ceramic analysis, and in elaborating the startling method of dendrochronology have drawn even more interest to the area's prehistory. On carefully preserved human skeletons anthropologists early noted that most Basket Maker ("pre-Pueblo") skulls were long headed and undeformed, whereas most crania from the Pueblo periods were short headed with marked artificial deformation. Early studies of physical anthropologists confirmed this contrast and archaeologists confidently explained the change as the result of a sweeping invasion of brachyranes, bringing a new culture and virtually replacing the earlier population. Since artificial flattening hid the exact form of the Pueblo skull by shortening it, anthropologists soon realized that the change in racial make-up of the Southwest plateau might be slower and smaller than first supposed. But the classic work of Hooton, showing the persistently fluctuating gradualness of genetic change during the height and decline of Pueblo culture at peripheral Pecos did not cover the Basket Maker-Pueblo transition, and the major work of Woodbury on Basket Makers is unpublished. It was the paper by Seltzer, therefore, given at the meeting of the American Association of Physical Anthropologists in 1936, which first showed the racial unity of Basket Maker-Pueblo populations and wiped out the picture of a sweeping racial change. This marked the end of an era of speculation.

The importance of the present monograph by Seltzer is that it opens the era of co-operation between different disciplines to solve the interlocking problems of cultural and racial prehistory in the Southwest.

Seltzer elaborates the evidence for chronological continuity of physical type in lucid detail as background for a study of Zuni crania of immediately pre-Spanish and Early Spanish (Pueblo IV and early V) date from Hawikuh, one of the famous seven cities of Cibola. This study, in turn, forms the background section of a larger work on the physical characters of the living Zunis. The Hawikuh Zunis form a genetically homogeneous group, much less variable than the Pecos people or our own cosmopolitan communities, and not



divisible into clear subtypes. The average Zuni skull has a narrow, high, and small braincase, intermediate in length-breadth proportion and relatively very high. The face is relatively very big (as in most mongoloids), linear, and absolutely high, with broad mesorrhine nose, very high orbits, relatively large, broad, and fairly protrusive mouth region, and deep chin. Comparisons between these Zunis and nine other Southwestern groups representing Basket Makers and Pueblos (mainly Pueblo IV date) show remarkable mutual resemblance between these ten populations. Among deviations from the Zuni series one might mention greater length of Basket Maker skulls, consistently slightly larger braincases of the other Pueblo groups, longer noses of Pueblo IV intruders into the Salt river region, and shorter faces and shallower jaws of Pueblo IV Pajarito Plateau cliff-dwellers. But all these series, measured by Hrdlička and seriated by Seltzer, resemble each other closely, form what Seltzer calls a Southwest Plateau stock, and differ consistently though not greatly from Hooton's Pecos series A. The latter have broader skull vaults, but still not quite brachycranic; longer skull bases; and broader and lower faces with broader orbits and shorter noses. Since the earlier populations of Pecos resemble the Southwest Plateau series more closely than do later Pecos populations, Seltzer hints that the Pecos group (and probably the whole Rio Grande) diverged increasingly because of absorption of individuals from various nomadic groups penetrating the Southwest (Apache, Navajo, Comanche). This could be the source of gradual change in the whole area.

Seltzer concludes that except in the Rio Grande area there is "a continuity of 'Southwest Plateau' stock from the Basket Maker period clear up to recent times;" and that "the presence of other physical types and deviations from the typical 'Southwest Plateau' pattern among the Pueblos and especially among the later Pueblos could be attributed for the most part to modifications of the original strain due to absorption of new blood through intermittent small contacts, intermarriage, selective genetic factors, or to the result of stimuli persistently present in the environment." Thus the author does not let his discovery of the unity of these populations allow him to overlook the dynamics of racial change or to deny altogether the existence of intruders. Rather, he brings the old picture into less distorted focus. Yet work on human remains is scarcely begun,

and "what is needed is the careful analysis of such skeletal material as may be clearly identified and associated with cultural remains, if we can ever hope to unravel the many complex problems which challenge . . . students of . . . prehistory."

The broadest importance of this monograph is its stress on the historical approach in any attempt to unravel a problem involving social biology. And the work achieves more than success in stressing the principle of genetic stability in a settled farming population plus the gradually inevitable nature of changes affecting it. Seltzer shows how much can be learned even from numerically inadequate data by checking probable errors with Fisher's "t" test to be certain of validity of observed differences; he stresses the danger of improper or ignorant use of human biological concepts, and the danger of confusing cultural with biological effects (as in cranial deformation); and by implication he stresses the value of understanding the interactions between a number of partly separate local breeding groups in study of cultural or racial dynamics.

Yet the originality and force of the whole work are marred by a gap uncontrollable by the author: Hrdlička, who measured the material, omitted vital observations. It is true that with our embryonic knowledge of human genetics we often record unnecessary data. But other American Indian material suggests that some record is desirable of details like forehead slope and constriction, flatness of temporal region, mastoid size, skull base breadth and contour, form and profiling of interorbital and nasal regions, malar form, jaw breadth, angulation, and chin prominence, and dental shape, as well as measurement of the post cranial skeleton. Adding such observations might clarify "modifications of the original strain" which measurements are too restricted to describe fully. In fact, many who know some of the material may feel that change in morphology exceeds the almost imperceptible metric changes outlined by the author and expresses genetic change more directly. No one is better equipped than Seltzer to make these observations in the future.

Meanwhile, the reviewer hopes that this monograph on racial prehistory will clarify the need for scientific study of adequate numbers of skeletons as well as living people in order to uncover the whole pattern of human development.

J. LAWRENCE ANGEL

DANIEL BAUGH INSTITUTE OF ANATOMY  
THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA



CATAWBA POTTERY-MAKING, WITH NOTES ON PAMUNKEY POTTERY-MAKING, CHEROKEE POTTERY-MAKING, AND COILING, by *Vladimir J. Fewkes*. *Proc. Amer. Phil. Soc.*, vol. 88, no. 2, July 1944, pp. 69-124. \$1.00.

The ceramic industry of the American Indian has been the subject of many studies. Each of these has varied with the interests of the investigator; with his powers of observation; his background; and with the method employed in analyzing the subject matter. Furthermore, as emphasized in the late Dr. Fewkes' recent paper, the value of these studies has varied with the manner of expressing the results of the analysis. The present paper is a relatively short but compact one and at first sight the reader is likely to accuse the author of making a mountain out of a mole hill. Actually, one finds that in the places where the author strains to supply accurate terms and descriptions there is a real need for precise definition. One of the most notable examples of this is found in his sections entitled "Segmental Building," pp. 78-81 and "Addendum: Coiling," pp. 110-122. The author provides a careful discussion of the various processes which have been loosely called "coiling" by too many students. Various terms for the processes have been developed and described and the usage of the term "coiling" has been discussed in some detail. The author makes a valuable contribution here in that he has provided a means which should enable students of pottery to describe their wares more accurately and in greater detail. Discussion of other features of the industry are equally precise. The account is limited to all observed details of the Catawba, Cherokee and Pamunkey Indian techniques. Even so, this is essential reading for anyone concerned with prehistoric pottery wherever found, to say nothing of the localized, modern, ceramic industries, revitalized by the "tourist trade" to become a source of revenue for acculturated Indian groups. As Fewkes progresses from "Acquisition and treatment of raw material"

through "Process of manufacture," "Forms," "Surface finish," "Decoration," "Drying process," "Firing," to end with "Post-firing treatment," one finds apt descriptions and comments which are basic to the whole study of pottery.

In addition to the study of the industry, an attempt is made to examine the industries for the purpose of investigating their history. This aspect is only partly successful because of the lack of old and trustworthy comparative data. In any case, the accounts of the former distribution of the Catawba in North Carolina are substantiated by the comparison of old and new pottery. The argument that present-day Cherokee pottery is an adaptation of the Catawba type is interesting and plausible. There is also an important account of the relationship between Catawba pottery and the Pamunkey and other Indian remnant groups in the southeast.

The final section, "Concluding Remarks and Comments," pp. 107-110, serves to state an extremely interesting and important anthropological problem. In the consideration of but a single industry, materials are supplied for a basic study of acculturation of the aborigines of the southeast. Of late, archaeological investigations in the southeast have provided a broad outline of events accompanying the rise and fall of native civilizations. The products of the ceramic industry supply the largest portion of the evidence upon which the historic sequence is built. Fewkes' important study is an able description of the present status of this sequence. From it one can see the results of the forces which have worked to submerge but not entirely obliterate the Indian in a wealth of European tradition. Further analyses of this sort will document the process of acculturation and supply a wealth of information concerning the effects of the impact of one civilization upon another.

FREDERICK JOHNSON

R. S. PEABODY FOUNDATION  
ANDOVER, MASS.



# BIBLIOGRAPHY OF ARCHAEOLOGICAL BOOKS—1944

DAVID M. ROBINSON

## GENERAL AND MISCELLANEOUS

- Bailey (A. E.) ed., Conant (K. J.), Smith (H. A.), Eastman (F.) *The Arts and Religion (The Ayer Lectures of the Colgate-Rochester Divinity School for 1943)*. New York, 1944, Macmillan. xiv, 180 pp. \$2.50.
- Bennett (W. C.) *Archeological Regions of Colombia: A Ceramic Survey* and Ford (J. A.) *Excavations in the Vicinity of Cali, Colombia*. New Haven, 1944, Yale University Press. 132 + 82 pp. \$2.50.
- Coon (C. S.), Andrews (J. M.) edd. *Studies in the Anthropology of Oceania and Asia presented in Memory of Roland Burrage Dixon (Papers of the Peabody Museum xx)*. Cambridge, Mass., 1943, Peabody Museum. xiv, 220 pp.; 7 text figs.; 20 pls.; 10 maps.
- Cox (W. E.) *The Book of Pottery and Porcelain*. New York, 1944, Crown. 2 vols.; 1000 pp.; 3000 ill. \$10.00.
- Col. J. T. Flanagan *Collection of Gold Coins*. Stack's Catalogue, March, 1944.
- Forster (N.) ed. *The Humanities after the War*. Princeton, 1944, Princeton University Press. vii, 95 pp. \$1.50.
- Frothingham (A. W.) *Talavera Pottery. With a Catalogue of the Collection of the Hispanic Society of America*. New York, 1944, Hispanic Society of America. xvii, 191 pp.; 156 ill. \$3.00.
- Gallatin (A. E.) ed. *Of Art—Plato to Picasso*. New York, 1944, Wittenborn and Co. 62 pp. \$1.50.
- Jacobsthal (P.) *Early Celtic Art*. 1944, Wittenborn and Co. 2 vols.; 270 pp.; 272 pls. \$65.00.
- Johnson (A. C.), Gehman (H. S.), Kase (E. H.) *John H. Scheide Biblical Papyri: Ezekiel*. Princeton, 1944, Princeton University Press. 194 pp.; 43 pls. \$10.00.
- Lebel (M.) *Les Humanités Classiques dans la Société Contemporaine. Trois-Rivières*, 1944, Société de Conférences Reflets. 33 pp. \$0.25.
- Lenzen (H.) *Art and Anatomy*. New York, 1944, J. J. Augustin. 16 colored drawings; 48 black and white drawings; text. \$5.00.
- Longyear (J. M.), app. S. H. Boggs. *Archaeological Investigations in El Salvador (Memoirs of the Peabody Museum, ix, No. 2)*. Cambridge, Mass., 1944, Peabody Museum. 101 pp.; ill.; maps. \$3.75.
- Mendelsohn (E.) *Three Lectures on Architecture*. Berkeley and Los Angeles, 1944, University of California Press. vii, 48 pp.; 35 ill. \$2.50.
- Guide to the Metropolitan Museum of Art*, 1944. New York, 1944, Metropolitan Museum of Art. 35 pp. \$0.10.
- Minns (E. H.) *The Art of the Northern Nomads (British Academy Annual Lecture on Aspects of Art, 1942)*. London, 1944, Humphrey Milford. 54 pp.; 28 pls.; map. 10s. 6d.
- Notes Hispanic 1944*. New York, 1944, Hispanic Society of America. 131 pp.; ill. \$1.00.
- Per I Monumenti d'Arte danneggiati dalla Guerra nella Campania. Foreword by P. Gardner and B. Malajoli. Naples, 1944. 32 pp.; ill.
- Pijoan (J.) *Arte de los Pueblos Aborígenes (Summa Artis, historia general de arte 1, 2nd ed.)*. 1944. 526 pp.; 701 ill.; 34 colored pls. \$9.00.
- Priest (A.), photographs T. Borsig. *Chinese Sculpture in the Metropolitan Museum of Art*. New York, 1944, Metropolitan Museum of Art. 81 pp.; 132 pls. \$4.00.
- Rowe (J. H.) *An Introduction to the Archaeology of Cuzco (Papers of the Peabody Museum xxvii, No. 2)*. Cambridge, Mass., 1944, Peabody Museum. 75 pp.; ill.; map. \$2.50.
- Sachs (C.) *The Rise of Music in the Ancient World, East and West*. New York, 1943, W. W. Norton. 324 pp.; ill. \$5.00.
- Smith (L. D.) *Counterfeiting. Crime against the People*. New York, 1944, W. W. Norton. 254 pp.; ill. \$3.50.
- Society of Antiquaries of London, *Archaeologia or Miscellaneous Tracts Relating to Antiquity xc (2nd Series, xl)*. Oxford, 1944, John Johnson. viii, 184 pp.; figs.; pls.
- Taylor (F. H.) *Babel's Tower. The Dilemma of the Modern Museum*. New York, 1945, Columbia University Press. 53 pp. \$1.00.
- Thurston (C.) *The Structure of Art*. Chicago, 1944, University of Chicago Press. xii, 190 pp.; 50 pls. \$2.50.
- Violich (F.) *Cities of Latin America*. New York, 1944, Reinhold Publ. Corp. 241 pp.; 145 ill. \$3.50.
- Wier (A. E.) *Thesaurus of the Arts: Drama, Music, Radio, Painting, Screen, Television, Literature, Sculpture, Architecture, Ballet*. New York, 1943, Putnam. 690 pp. \$5.00.
- Wright (G. E.), Filson (F. V.), introd. W. F. Albright. *The Westminster Historical Atlas to the Bible*. Philadelphia, 1945, Westminster Press. 114 pp.; 18 pls.; 34 maps; 77 figs. \$3.50.
- Zucker (P.) ed. *New Architecture and City Planning, A Symposium*. New York, 1944, Philosophical Library of New York. xv, 694 pp.; ill. \$10.00.

## NEAR EAST

- Baqir (T.) *Iraq Government Excavations at 'Aqar Quf, 1942-1943 (Supplement to Iraq)*. London, 1944, Humphrey Milford. 16 pp.; 20 pls.
- Bossert (H. T.) *Ein hethitisches Königssiegel, Neue Beiträge zur Geschichte und Entzifferung der hethitischen Hieroglyphenschrift (Istanbuler Forschungen herausgegeben von der Zweigstelle Istanbul des archäologischen Instituts des Deutschen Reiches, Band 17)*. Berlin, 1944. xv, 320 pp.; 132 figs.
- Dimand (M. S.) *A Handbook of Muhammadan Art*. New York, 1944, The Metropolitan Museum of Art. x, 347 pp.; 213 ill. \$2.50.
- Faris (N. A.) ed. *The Arab Heritage*. Princeton, 1944, Princeton University Press. xi, 279 pp.; 18 figs. \$3.00.
- Gelb (I. J.) *Hurrians and Subarians (The Oriental Institute of the University of Chicago, Studies in Ancient Oriental Civilization, No. 22)*. Chicago, 1944, University of Chicago Press. xv, 128 pp.; map. \$2.50.
- Hill (D. K.) *The Fertile Crescent: Art and History of*



Bible Lands as Illustrated in the Walters Art Gallery. Baltimore, 1944, Walters Art Gallery. 52 pp. \$0.27.

**Kramer (S. N.)** Sumerian Mythology. A Study of Spiritual and Literary Achievement in the Third Millennium B.C. (Memoirs of the American Philosophical Society xxi). Philadelphia, 1944, The American Philosophical Society. xiv, 125 pp.; 2 figs.; 20 pls.; frontispiece; map. \$2.00.

**Legrain (L.)** The Babylonian Collections of the University Museum (University Museum Bulletin x, Nos. 3-4). Philadelphia, 1944, University Museum. 78 pp.; 50 figs.

**Lloyd (S.)** Ruined Cities of Iraq. New York, 1942, 1944, Oxford University Press. 78 pp. \$1.25.

**Maisler (B.)** Beth She'arim: Report on the Excavations during 1936-1940. Vol. 1: Catacombs I-IV. Jerusalem, 1944, The Jewish Palestine Exploration Society (in Hebrew). 130 pp.; 42 pls.

**Romanoff (P.)** Jewish Symbols on Ancient Jewish Coins. New York, 1944, Numismatic Review for the Dropsie College for Hebrew and Cognate Learning. xv, 79 pp. \$3.50.

**Stephens (F. J.)** Old Assyrian Letters and Business Documents (Babylonian Inscriptions in the Collection of James B. Nies vi). New Haven, 1944, Yale University Press. vii, 30 pp.; 84 pls. \$5.00.

**Thompson (G. C.)** The Tombs and Moon Temple of Hureidha (Hadhranaut) (Reports of the Research Committee of the Society of Antiquaries of London, No. xiii). London, 1944, Oxford University Press. xv, 191 pp.; 81 pls. and charts. 25s.

## EGYPT

**Davies (N. de G.) ed., Bull (L.) and Scott (N.)** The Tomb of Rekh-mi-Re at Thebes (Publications of the Egyptian Expedition xi). New York, 1943, Metropolitan Museum of Art. 2 vols; ix, 118 pp.; 117 pls. Vol. 1, text, Vol. 2, pls. \$25.00.

**Husselmann (E. M.), Boak (A. E. R.), Edgerton (W. F.)** Papyri from Tebtunis. Part II (Michigan Papyri, Vol. v). Ann Arbor, 1944, University of Michigan Press; London, 1944, Humphrey Milford, Oxford University Press. xx, 446 pp.; 1 fig.; 6 pls. \$5.00.

**Johnson (A. C.), Goodrich (S. P.)** Papyri in the Princeton University collections III. Princeton, 1944, Princeton University Press. 136 pp. \$3.00.

**Riefstahl (E.)** Patterned Textiles in Pharaonic Egypt. Brooklyn, 1944, Brooklyn Museum. iii, 56 pp.; 56 figs.

**Scott (N. C.)** The Home Life of the Ancient Egyptians. New York, 1944, Metropolitan Museum of Art. 32 pp.; ills. \$0.25.

**Smith (S.)** Sir Flinders Petrie, 1852-1942 (British Academy Obituary Series). London, 1943, Oxford University Press. 20 pp. 3s.

**West (L. C.), Johnson (A. C.)** Currency in Roman and Byzantine Egypt. Princeton, 1944, Princeton University Press. 195 pp. \$3.00.

**Westermann (W. L.), Nock (A. D.) and others.** Coptic Egypt (Symposium Papers Read at the Brooklyn Museum, January 23 to March 9, 1941). New York, 1944, John B. Watkins Co. 58 pp. \$0.75.

**Winlock (H. E.)** Excavations at Deir El Bahri, 1911-1931. New York, 1944, Macmillan. 261 photographs, 14 plans and drawings. \$5.00.

**Youtie (H. C.), Pearl (O. M.)** Papyri and Ostraca from Karanis (University of Michigan Studies, Humanistic Series XLVII, Michigan Papyri, VI). Ann Arbor, 1944, University of Michigan Press. xxi, 252 pp.; 7 pls. \$4.00.

## CLASSICAL ARCHAEOLOGY

### GREEK AND ROMAN

**Fränkel (H.)** The Immigrant's Bath (University of California Publications in Classical Philology xii, 293-294). Berkeley and Los Angeles, 1944, University of California Press. \$0.25.

**Elderkin (G. W.)** Archaeological Papers VI. Springfield, Mass., 1945, Pond-Ekberg Co. 65 pp.; ills. \$1.75.

**Harsh (P. W.)** A Handbook of Classical Drama. Stanford University, 1944, Stanford University Press. xii, 526 pp. \$4.00.

**Rostovtzeff (M. I.), Bellinger (A. R.), Brown (F. D.), Welles (C. B.)** edd. The Excavations at Dura-Europos. Preliminary report of the 9th season of work, 1935-1936. Part 1: The Agora and Bazaar. New Haven, 1944, Yale University Press. xi, 270 pp.; 98 figs.; 30 pls. \$5.00.

**Rousseaux (A.)** Le Monde Classique. Montreal, 1943, Les Editions Variétés. 250 pp. \$1.25.

**Schefold (K.)** Die Bildnisse der antiken Dichter, Redner und Denker. Basel, 1943, Bruno Schwabe & Co. 228 pp.; c. 200 ills. on 70 pls.; 12 figs. \$9.00.

**Taubenschlag (R.)** The Law of Greco-Roman Egypt in the Light of the Papyri 332 B.C.-640 A.D. New York, 1944, Herald Square Press. xv, 488 pp. \$12.50.

### GREEK: MODERN

**Fay (J. W.)** A Practical Introduction to Spoken Modern Greek. New York, 1944, Frederick Ungar Publ. Co. vi, 89 pp. \$1.25.

The Greek Dodecanese: A Symposium by Prominent Americans. N. G. Mavris, ed. New York, 1944, Dodecanesian National Council. 110 pp. \$0.50.

**Sedgwick (A. C.)** Tell Sparta. New York, 1945, Houghton-Mifflin. 342 pp. \$2.50.

**Wescott (G.)** Apartment in Athens. New York, 1945, Harper. 268 pp. \$2.50.

### GENERAL AND MISCELLANEOUS

**Björck (G.)** Apsyrus, Julius Africanus et l'Hippiatrique grecque (Uppsala Universitets Avskrift, 1944: 4). Uppsala, 1944, Lundequist. 70 pp. 3 kr.

**Bolling (G. M.)** The Athetized Lines of the Iliad. Baltimore, 1944, Waverly Press, for the Linguistic Society of America. 200 pp. \$4.00.

**Bowra (C. M.)** Sophoclean Tragedy. Oxford, 1944, Clarendon Press. vii, 384 pp. 20s.

**Calhoun (G. M.)** Introduction to Greek Legal Science. Francis de Zulueta ed. Oxford, 1944, Clarendon Press; New York, 1944, Oxford University Press. v, 86 pp. 5s., \$1.50.

**Davis (G.), Hoyningen-Huene (G.), Chisholm (H.)** Hellas: A Tribute to Classical Greece. 2nd edition. New York, 1944, J. J. Augustin. 143 pp. \$10.00.

**Edelstein (L.)** The Hippocratic Oath: Text, Translation, and Interpretation (Bulletin of the History of Medicine, Suppl. No. 1). Baltimore, 1943, Johns Hopkins Press. vii, 64 pp. \$1.25.

**Ferguson (W. S.)** The Attic Orgeones, and Nock (A. D.) The Cult of Heroes. Reprinted from The Harvard Theological Review xxxvii, 1944, pp. iv, 61-174.

**Fontenrose (J.)** The Festival Called Boegia at Didyma (University of California Publications in Classical Archaeology 1, 291-304; pls. 38-40). Berkeley and Los Angeles, 1944, University of California Press. \$0.25.

**Greene (W. C.)** Moira. Fate, Good, and Evil in Greek Thought. Cambridge, Mass., 1944, Harvard University Press. viii, 450 pp. \$5.00.

**Giustiniani (H.), Argenti (P. B.)** ed. History of Chios.



- Cambridge, 1943, Cambridge University Press. xxxvi, 462 pp. 42s.
- Hoerber (R. G.)** The Theme of Plato's Republic. St. Louis, 1944, Eden Publ. House. x, 119 pp. (Washington University Dissertation).
- Jaeger (W.)** Paideia: the Ideals of Greek Culture; tr. from German ms. by Gilbert Highet: 4 vols., vol. 3, The Conflict of Cultural Ideas in the Age of Plato. New York, 1944, Oxford University Press. viii, 374 pp. \$3.75.
- Le Comte (E. S.)** Endymion in England. The Literary History of a Greek Myth. New York, 1944, King's Crown Press. xii, 189 pp. \$2.25.
- Linforth (I. M.)** Soul and Sieve in Plato's Gorgias (University of California Publications in Classical Philology xii, 295-314). Berkeley and Los Angeles, 1944, University of California Press. \$0.25.
- Livingstone (R. W.)** Plato and Modern Education (The Rede Lecture, 1944). Cambridge, England, 1944, Cambridge University Press; New York, 1944, Macmillan. 36 pp. 1s. \$0.75.
- Oates (W. J.), Murphy (C. T.)** edd. Greek Literature in Translation. New York, 1944, Longmans, Green. xvi, 1072 pp.; map. \$5.00.
- Richter (G. M. A.)** Archaic Attic Gravestones (Martin Classical Lectures x). Cambridge, Mass., 1944, Harvard University Press. xvi, 160 pp.; ills. \$2.50.
- Greek Painting. The Development of Pictorial Representation from Archaic to Graeco-Roman Times. New York, 1944, Metropolitan Museum of Art. 24 pp.; 37 ills. \$0.50.
- Robinson (D. M.)** The Great Glory and Glamor of the Dodecanese. New York, 1944, Dodecanesian National Council. 30 pp.; 20 figs. \$1.00.
- Smith (W. B.), Miller (W.)** The Iliad of Homer. A line for line translation in dactylic hexameters. New York, 1944, Macmillan. xx, 565 pp. \$3.75.
- Tolles (D.)** The Banquet-Libations of the Greeks. Ann Arbor, 1943, Edwards Brothers, Inc. vii, 114 pp. (Bryn Mawr dissertation).
- Turyn (A.)** The Manuscript Tradition of the Tragedies of Aeschylus (Polish Institute Series, No. 5). New York, 1944, Polish Institute of Arts and Sciences in America, Herald Square Press. xiv, 224 pp. \$5.00.

## GREEK INSCRIPTIONS

- Holleaux (M.)** Études d'épigraphie et d'histoire grecques. Tome III. Lagides et Séleucides. Paris, de Boccard, 1942. 404 pp.
- Robert (L.)** Hellenica. Recueil d'épigraphie, de numismatique et d'antiquités grecques. Vol. 1. Limoges, Bontemps, 1940-44. 155 pp.
- Roques (M.)** Notice sur la vie et les travaux de M. Maurice Holleaux. Macon, Protat Frères, 1943, 61 pp.

## GREEK ARCHITECTURE

- Broneer (O.)** The Tent of Xerxes and the Greek Theater (University of California Publications in Classical Archaeology 1, 305-312). Berkeley and Los Angeles, 1944, University of California Press. \$0.25.
- Holland (L. B.)** Colophon (Hesperia XIII, 1944, pp. 93-171; 30 figs.; 11 pls.). Baltimore, J. H. Furst Co., for the American School of Classical Studies at Athens.

## GREEK VASES

- Smith (H. R. W.)** The Hearst Hydria. An Attic Footnote to Corinthian History (University of California Publications in Classical Archaeology 1, 241-290, pls. 33-37). Berkeley and Los Angeles, 1944, University of California Press. \$0.75.

- Webster (T. B. L.)** New Greek Vases in the Manchester Museum (Museum Publications N. S. 2). Manchester, England, 1944, Manchester Museum. Description of 4 vases; 4 pls. 6d.

## ROMAN

- Basch (A.)** Ampurias. Barcelona, Servicio de Investigaciones arqueológicas, 1944. 80 pp.; 16 figs., 28 pls.
- Boak (A. E. R.)** A History of Rome to 565 A.D. 3rd edition. New York, 1943, Macmillan. xiii, 552 pp.; ills.; maps. \$4.50.
- Clift (E. H.)** Latin *Pseudepigrapha*. A Study in Literary Attributions. Baltimore, 1945, J. H. Furst Company. 158 pp. (Johns Hopkins dissertation). \$2.00.
- Dawson (C. M.)** Roman-Campanian Mythological Landscape Painting (Yale Classical Studies ix). New Haven, 1944, Yale University Press. xvi, 233 pp.; 25 pls. \$3.00.
- Durant (W.)** Caesar and Christ, a History of Roman Civilization and of Christianity from their Beginnings to A.D. 325 (The Story of Civilization III). New York, 1944, Simon and Schuster. 768 pp. \$5.00.
- Elderkin (K.)** From Tripoli to Marrakesh. Springfield, Mass., 1944, Pond-Ekberg Co. 303 pp.; 137 pls. \$3.75.
- Fosca (F.)** L'Art Roman en Suisse. 1943. 26 pp.; 85 pls. \$11.00.
- Friedländer (P.)** Documents of Dying Paganism. Textiles of Late Antiquity in Washington, New York and Leningrad. Berkeley, 1944, University of California Press. 66 pp. \$1.50.
- Gordon (A. E.)** A Mysterious Latin Inscription in California (University of California Publications in Classical Archaeology 1, 313-356, pls. 41-42). Berkeley and Los Angeles, 1944, University of California Press. \$0.50.
- Griffiths (A. H.)** Temple Treasures. A Study Based on the Works of Cicero and the *Fasti* of Ovid. Philadelphia, 1943, Gettysburg Times and News Publishing Co. xvii, 138 pp. (University of Pennsylvania dissertation).
- Guinagh (K.), Dorjahn (A. P.)** Latin Literature in Translation. New York, 1944, Longmans, Green. 822 pp.; map. \$4.00.
- Jasny (N.)** Wheat Prices and Milling Costs in Classical Rome (Wheat Studies of the Food Research Institute, Stanford University xx, 137-170). Stanford University, 1944, Stanford University Press. \$1.00.
- Kennedy (E. C.), White (G. W.)** S.P.Q.R. The History and Social Life of Ancient Rome. London, 1944, Macmillan. xii, 278 pp.; 12 ills.; 5 maps. 4s.
- Nash (E.)** Roman Towns. New York, 1944, J. J. Augustin. 202 pp.; 3 figs.; 138 pls.; 7 plans. \$6.00.
- Paoli (U. E.)** Urbs: Aspetti di Vita Romanica Antica (2nd edition). Firenze, 1942, Felice le Monnier. xiii, 239 pp.; 23 figs.; 40 pls. 22 lire.
- Perkins (J. R.)** The Emperor's Physician. Indianapolis, 1944, Bobbs-Merrill. 245 pp. \$2.50.
- Salmon (E. T.)** A History of the Roman World (Macmillan's History of the Greek and Roman World Series VII). New York, 1945, Macmillan. 363 pp. \$5.50.

## LATER ART

- Bromberg (P.)** Decorative Arts in the Netherlands. New York, 1944, Netherlands Information Bureau. 62 pp.; 38 ills. \$0.60.
- Carnegie Institute, Pittsburgh, Russian Icons and Objects of Ecclesiastical and Decorative Arts from the Collection of George R. Hann, text by A. Avinov. Pittsburgh, 1944, Carnegie Institute. 29 pp. + catalogue entries for 252 items; 19 pls. \$1.00.



- De Tolnay (C.)** History and Technique of Old Master Drawings, A Handbook. New York, 1944, H. Bittner. vii, 155 pp.; 261 ills. \$20.00.
- De Tolnay (C.)** Michelangelo, Vol. II. The Sistine Chapel. Princeton, 1944, Princeton University Press. c. 375 pp. \$17.50.
- Douglas (R. L.)** Leonardo da Vinci: His Life and his Pictures. Chicago, 1944, University of Chicago Press. xiii, 127 pp.; 52 pls. \$4.00.
- Duveen Sculpture in Public Collections of America. A Catalogue Raisonné with Illustrations of Italian Renaissance Sculptures by the Great Masters which have passed through the House of Duveen. New York, 1944, William Bradford Press. Unpaged.
- Frenkley (A.)** Stones of Glory—Stones of France: A Pictorial Sequence of French Architectural Monuments. New York, 1944, International University Press. xxxii pp.; 140 pls. \$6.00.
- Hatfield (H. C.)** Winckelmann and his German Critics, 1755–1781. A Prelude to the Classical Age (Columbia University Germanic Studies, new series, No. 15). New York, 1943, Columbia University Press. 169 pp. \$1.75.
- Johnson (A. M.)** Hispanic Silverwork. New York, 1944, Hispanic Society of America. 308 pp.; 206 ills. \$4.00.
- Kernodle (G. R.)** From Art to Theatre: Form and Convention in the Renaissance. Chicago, 1944, University of Chicago Press. ix, 255 pp.; 73 ills. \$5.00.
- Lafuente (E.)** Diego Rodriguez de Silva y Velázquez, 1599–1660. Oxford, 1944, G. Allen (Phaidon). 33 pp.; 161 pls. \$5.50.
- Panofsky (E.)** Albrecht Dürer. Revised 2nd printing. Princeton, 1944, Princeton University Press. 2 vols.; 716 pp. \$20.00.
- Puyvelde (L. van)** The Dutch Drawings in the Collection of His Majesty the King at Windsor Castle. New York, 1944, Oxford University Press (Phaidon). 80 pp.; 150 ills. \$5.50.
- Tietze (H.), Tietze-Conrat (E.)** The Drawings of the Venetian Painters in the 15th and 16th Centuries. New York, 1944, J. J. Augustin. 500 pp.; 200 pls. \$25.00.
- Van der Elst (J.)** The Last Flowering of the Middle Ages. New York, 1944, Doubleday, Doran. 127 pp.; ills. \$7.50.
- Venturi (L.)** How To Look at a Picture. Giotto To Chagall. New York, 1944, Charles Scribner's Sons. 250 pp., 53 pls. \$3.50.



# BIBLIOGRAPHIES OF BOOKS PUBLISHED SINCE THE OUTBREAK OF THE WAR \*

## FRANCE

- Alep. Musée national syrien; Musée national archéologique d'Alep (Syrie). Antiquités assyriennes, hittites, mitaniennes, préhistoriques. Catalogue. 35 fr.
- Anfray (M.) L'Architecture Normande, son influence dans le Nord de la France aux xie et xiiie siècles. Picard, Paris, 1939. 270 fr.
- Babelon. La Numismatique. Presses Universitaires de France, Paris, 1944. 18 fr.
- Babelon (J.) Le Portrait dans l'antiquité d'après les monnaies. Payot, Paris, 1942. 125 fr.
- Bérard (J.) Bibliographie topographique des principales cités grecques de l'Italie méridionale et de la Sicile dans l'antiquité. E. de Boccard, Paris, 1941.
- La Colonisation grecque de l'Italie méridionale et de la Sicile dans l'antiquité. 2 parts. E. de Boccard, Paris, 1941. 150 fr.
- Bloch (H.), Carcopino (J.) Histoire Romaine II, La République romaine de 133 avant J.C. à la mort de César: 1, Des Gracques à Sulla. Presses Univ., Paris, 1940. 60 fr.
- Boissier (A.) Archéologie hittite. Geuthner, Paris, 1939. 12 fr.
- Boudot-Lamotte. Athènes et l'Attique. Ed. "TEL", Paris, 1941. 75 fr.
- Briem. Les Sociétés secrètes de mystères, les mystères hellénistiques. Payot, Paris, 1941. 60 fr.
- Brinard (B.) Cunault, ses chapiteaux de xiiie siècle. Picard, Paris, 1937. 200 fr.
- Brun. Les lampes antiques (grecques et romaines) en argile et en bronze du Musée Calbert à Avignon. 1939. 45 fr.
- Bruyère—Rapport sur les fouilles de Deir el Medineh (1934-35). Le village, les décharges publiques, la station de Col de la Vallée des rois. Adrien-Maisonneuve, Paris, 1939. 300 piasters Egypt.
- Carcopino (J.) Le Maroc antique. Gallimard. NRF. 130 fr.
- Chapouthier (F.), Demargne (P.) Fouilles exécutées à Mallia, par l'École française d'Athènes; Troisième rapport, Exploration du palais, bordures orientale et septentrionale. Geuthner, Paris, 1942. 250 fr.
- Chatelain (L.) Recueil des inscriptions latines du Maroc, fasc. 1, 1942 . . . 150 fr.
- Chenet (G.) La Céramique gallo-romaine d'Argonne de Ire siècle et la terre sigillée décorée à la molette. Protat frères. 250 fr.
- Cohen. La Grèce et l'hellénisation du monde antique. Nouv. ed. Presses Univ. Paris, 1939. 75 fr.
- Contenau (G.) La Divination chez les Assyriens et les Babyloniens. Payot, Paris, 1940. 50 fr.
- Corpus Vasorum Antiquorum—  
France 15, Petit Palais. 400 fr.  
France 16, Musée Rodin—in press.  
Denmark 6. 300 fr.

\* Through the kindness of Lieut. Col. Ernest De Wald and Sgt. Saul S. Weinberg we are able to print this list of new books from France, Germany and Italy. The list compiled by De Wald was very kindly furnished by Professor Frederick S. Stohman of Princeton University. For some of the many archaeological books printed in Russia during this period the reader is referred to pages 178-179 of this issue of the JOURNAL. Editor.

- Coste-Messelière (P. de la) Delphes. Edit. du Chêne, Paris, 1943. 2100 fr.
- Courcelle. Lettres grecques en Occident de Macrobie à Cassidore. 400 fr.
- Croiset (M.) La Civilisation de la Grèce antique. Payot, Paris, 1943. 84 fr.
- Cumont (F.) Recherches sur le symbolisme funéraire des Romains. Geuthner, Paris, 1942. 650 fr.
- La Stèle du Danseur d'Antibes, et son décor végétale. Geuthner, Paris, 1942. 40 fr.
- Daux (G.) Fouilles de Delphes III. Épigraphie. Chronologie Delphique. E. de Boccard, Paris, 1943. 300 fr.
- Fouilles de Delphes—Tome III, Épigraphie. Fasc. 3, Inscriptions depuis le trésor des Athéniens jusqu'aux bases de Gelon. 2eme livraison. E. de Boccard, Paris, 1943.
- DeLanghe. Les textes de Ras Shamra-Ugarit et leurs rapports à l'histoire des origines israelites. 1939.
- Delaporte (L.) Malatya. Arslantepe I. La Porte des Lions. E. de Boccard, Paris, 1940. 300 fr.
- Delvoye. L'Archéologie byzantine en Grèce. Bruxelles, 1942.
- Demangel (P.)—Mamboury (E.) Le Quartier des Manges et la première région de Constantinople. E. de Boccard, Paris, 1939. 325 fr.
- Demargne (P.) Le Maître des animaux sur une gemme crétoise de MM I. Geuthner, Paris, 1939. 7.50 fr.
- Dhorme (E.), Dussaud (R.) Sumer et Akkad, Babylonie et Assyrie, Kourrites et Hittites, Phéniciens et Syriens. Presses univ. de France. Paris.
- Droux. La Bourgogne préhistorique. La Néolithique en Cote-d'Or. 1941.
- Dussaud (R.) Les Découvertes de Ras Shamra-Ugarit et l'Ancien Testament. 2e ed. Geuthner, Paris, 1941. 100 fr.
- Feyel (M.) Polybe et l'histoire de Béotie au iie siècle avant notre ère. E. de Boccard, Paris, 1942. 120 fr.
- Foucher (A.) La vieille route de l'Inde de Bactres à Taxila. T. I. Introduction; 1re part. La géographie et la route; 2me part. L'Archéologie de la route. Les Editions d'Art et d'Histoire, Paris, 1942. 200 fr.
- Furon (R.) Manuel de préhistoire générale: Europe, Asie, Afrique, Amérique, 2e ed. Payot, Paris, 1943. 80 fr.
- Gabriel (A.) Chateaux turcs du Bosphore (Mémoires de L'Institut français d'archéologie de Stamboul IV), E. de Boccard, Paris, 1943. 450 fr.
- Voyages archéologiques dans la Turquie orientale. E. de Boccard, Paris, 1942. 1500 fr.
- Gallia. Fouilles et monuments archéologiques en France métropolitaine. T. I, fasc. 2. Presses universitaires, Paris, 1943. 200 fr.
- Ghirshman (R.) Fouilles de Sialk II. Geuthner, Paris, 1939. 250 fr.
- Glory. A la découverte des hommes préhistoriques. Alsatia. 42 fr.
- Gorce, Mortier. L'histoire générale des religions. 4me vol. Grèce et Rome. Quillet.
- Grenier (A.) Camille Julian, Un demi-siècle de science historique et de progrès français, 1880-1930. A. Michel, Paris, 1944. 78 fr.
- Grimal (P.) Les Jardins Romains. E. de Boccard, Paris, 1942. 400 fr.



- Grousset (R.)** *Le Conquérant du Monde* (vie de Gengis-khan). A. Michel, Paris, 1944. 100 fr.
- Gruneisen (W. de)** *Sculpture grecque archaïque: Étude sur les Kouros et les Kores*. Paris. Ed. Universitaires, Paris, 1940. 180 fr.
- Guignebert (C.)** *Le Christ*. A. Michel, Paris, 1943.
- Guillon (P.)** *Les Trépieds du Ptoion*, 2 vols. E. de Boccard, Paris, 1943. 350 fr.
- Hackin (J.)** *Recherches archéologiques à Bagram*. 2 vols. Les edit. d'art et d'histoire, Paris, 1939. 275 fr.
- Haudricourt (A. G.), Hédin (L.)** *L'Homme et les plantes cultivées*. Gallimard, NRF. Paris, 1943.
- Hauteceur (L.)** *Histoire de l'Architecture classique en France*. 1. La Formation de l'idéal classique. 1. La Renaissance. 2. L'Architecture sous Henri iv et Louis xiii. 2 vol. Picard, Paris, 1943. 850 fr.
- Holleaux (M.)** *Études d'épigraphie et d'histoire grecques*, 3me vol., Lagides et Séleucides. E. de Boccard, Paris, 1942. 200 fr.
- Homo (L.)** *Histoire Romaine* III. Le Haut-Empire. Presses univ., Paris, 1941. 60 fr.
- Huart (C.), Delaporte (L.)** *L'Iran antique*. A. Michel, Paris, 1943. 75 fr.
- Institut français d'archéologie de Stamboul**. Phrygie. Exploration archéologique, faite et publiée sous la direction de M. Albert Gabriel. Tome 1. Géologie et géographie physique, par **Ernst Chaput**. E. de Boccard, Paris, 1941. 350 fr.
- Institut français de Damas**. Les Monuments Ayyoubides de Damas. Livraison II. E. de Boccard, Paris, 1940. 100 fr.
- Jerphanion (G. de)** *Un nouvel encensoir syrien et la série des objets similaires*. Geuthner, Paris, 1939. 20 fr.
- Kachkarov (D. N.), Korovine (E. P.)** *La Vie dans les déserts*. Ed. franc. par **Th. Monod**. Payot, Paris, 1942.
- Kherumian (R.)** *Les Arméniens, introduction à l'anthropologie du Caucase*, 1943. 250 fr.
- Lacroix (L.)** *Étude sur la céramique grecque d'Italie méridionale*. Ed. Univ., Paris, 1940. 100 fr.
- Lafargue (M.)** *Les Chapiteaux de cloître de Notre-Dame la Daurade*. Picard, Paris, 1940. 175 fr.
- L'Année épigraphique*—1939 (35 fr.), 1940 (40 fr.), 1941 (40 fr.), 1942—43 (50 fr.). Presses univ., Paris.
- Lapalus (E.)** *Délos. Agora des Italiens*. Exploration archéologique de Délos, Fasc. XIX. E. de Boccard, Paris, 1939. 400 fr.
- Lecour**. *Un Sanctuaire de la préhistoire. La Crète et ses mystères*. Atlantis, 1940. 15 fr.
- Lejeune (M.)** *Observations sur la langue des actes d'affranchissement delphique*. Klincksieck, 1940. 80 fr.
- Leroi-Gourham (A.)** *L'Homme et la Matière*. A. Michel, Paris, 1943. 55 fr.
- Leroux (G.)** *Les Premières Civilisations de la Méditerranée*. Presses univ., Paris, 1941. 12 fr.
- Lindner**. *La Chasse préhistorique*. Payot, Paris, 1941. 125 fr.
- Lommel**. *Les Anciens Aryens*. Gallimard, NRF. 45 fr.
- Malatya-Fouilles de la Mission archéologique française** dir. par **Louis Delaporte**. Arslantepe I. La Porte des Lions. E. de Boccard, Paris, 1940. 300 fr.
- Manuel de la technique des fouilles archéologiques*. Office International des Musées. Publication de l'Institut International de Coopération Intellectuelle. Paris, 1939. 200 fr.
- Maurras**. *Le Voyage d'Athènes*. Plon, 1939. 50 fr.
- Méautis (G.)** *Mythes inconnues de la Grèce antique*. A. Michel, Paris, 1944. 54 fr.
- Mecquenem, Contenau (G.), Pfister (R.), Delaiev**. *Mémoires de la mission archéologique en Iran*. T. XXXIX: Mission en Susiane. Presses univ. Paris. 400 fr.
- Mélanges syriens offerts à M. René Dussaud*. 2 vol. Geuthner, Paris, 1938—39. 750 fr.
- Mentandon**. *L'Homme préhistorique et les Préhumains*. Payot, Paris. 125 fr.
- Merlin (A.)** *Inscriptions Latines de la Tunisie*. Presses univ., Paris, 1944. 200 fr.
- *L'Année Épigraphique* 1941, 1942, 1944. Presses univ., Paris.
- Meunie (J.)** *Shotorax (Mémoires de la Délégation Archéologique Française en Afghanistan, Tome x)* Ed. d'Art et d'Histoire, Paris, 1942. 300 fr.
- Meunier (M.)** *Récits sacrés de l'Ancien et du Nouveau Testament*. A. Michel, Paris, 1941. 40 fr.
- Nougayrol (J.)** *Cylindres-sceaux et empreintes de cylindres trouvés en Palestine (au cours de fouilles régulières)*. Geuthner, Paris, 1939. 80 fr.
- Oulie**. *Les Animaux dans la peinture de la Grèce préhellénique*. Presses univ., Paris, 45 fr.
- Parrot (A.)** *Les Fouilles de Mari, 4me—5me campagnes*. 2 vol. 40 fr. each. Geuthner, Paris.
- Passemer (E.)** *See Préhistoire* IX.
- Perrit**. *Les Origines de la légende troyenne de Rome*. Les Belles Lettres, 1942. 200 fr.
- Pfister (R.)** *Textiles de Palmyre*. Ed. d'Art et d'Histoire, Paris, 1940. 150 fr.
- Picard (C.)** *Manuel d'archéologie grecque. La Sculpture*. II—Période classique—ve siècle. 2 vols. Picard, Paris, 1939. 265 fr.
- Préhistoire*. T. IX: La Caverne d'Isturitz. Presses universitaires, Paris, 1944. 250 fr.
- Revue de l'Égypte Ancienne* III, Fasc. 1—2. Champion, Paris, 1940.
- Robert (F.)** *Thymele. Recherches sur la signification et la destination des monuments circulaires dans l'architecture religieuse de la Grèce*. E. de Boccard, Paris, 1939. 150 fr.
- Robert (L.)** *Les Gladiateurs dans l'Orient grec*. Champion, Paris, 1940.
- Robin (L.)** *Pyrrhon et le scepticisme grec*. Presses univ., Paris, 1944. 70 fr.
- Roton**. *Homère: L'Iliade illustrée par la céramique grecque*. Delmas. 350 fr.
- Salin (E.), France-Lanord (A.)** *Le Fer à l'époque mérovingienne. Étude technique et archéologique*. Geuthner, Paris, 1943. 650 fr. (Rhin et Orient II).
- Salin (E.)** *Le Haut Moyen-Age en Lorraine, d'après le mobilier funéraire*. Geuthner, Paris, 1939. 650 fr. (Rhin et Orient I).
- Sauvaget (J.)** *Alep: Essai sur la développement d'une grande ville syrienne des origines au milieu de XIXe siècle*. 2 vol. Geuthner, Paris, 1941. 650 fr.
- Schaeffer (C. F. A.), Dossin (G.), Virolleaud (Ch.)** *xe et xie campagnes de fouilles à Ras Shamra-Ugarit*. Geuthner, Paris, 1941. 100 fr.
- Scheffer, Thassilo de**. *Mystères et Oracles helléniques*. Payot, Paris, 50 fr.
- Schlumberger (D.)** *Les fouilles de Qasr el-Fair Gharbi, rapport préliminaire (T. Syria)*, 1939. 100 fr.
- Thouvenot (R.)** *Essai sur la Province romaine de Bétique*. E. de Boccard, Paris, 1940. 250 fr.
- Vallois (R.)** *Architecture hellénique et hellénistique à Délos jusqu'à l'éviction des Déliens (166 B.C.)*. Première Partie. Les Monuments. E. de Boccard, Paris, 1944. 300 fr.
- Valmin (N.)** *Fouilles de Delphes—Tome III, Épigraphie—Fasc. 6, Inscriptions du Théâtre*. E. de Boccard, Paris, 1939. 240 fr.
- Vandier (J.)** *La Religion Égyptienne (Les Anciennes religions orientales I)*. Presses univ., 1944.
- Van Gennep (L.)** *Manuel de Folklore français contemporain I*. Picard, Paris, 1943. 175 fr.
- Vaufrey**. *L'Art rupestre nord-africain*. Masson, 1939. 300 fr.



- Waltz (P.) *La Question d'Orient dans l'Antiquité*. Payot, Paris, 1942. 90 fr.
- Wuilleumier (P.) *Tarente*. E. de Boccard, Paris, 1939.
- GERMANY (INCLUDING AUSTRIA)**
- Akurgal (E.) *Griechische Reliefs des VI Jhr. aus Lykien*. Berlin, 1941. (Deutsches Archaeologisches Institut).
- Andrae (W.) *Alte Feststrassen im Nahen Osten*. Leipzig, 1941. (Hinrichs).
- Arndt (P.), Amelung (W.) *Photographische Einzelaufnahmen antiker Skulpturen*. G. Lippold. Text. Ser. xvi B. München, 1940.
- Arnoldsson (G.) *Valsagarde 6*. Berlin, 1942. (Acta Musei Antiquitatum Septentrionalium Regiae Univ. Upsalensis. I: Die Gräberfunde von Valsagarde, vol. 1).
- Bahmann (K.) *Die romanische Kirchenbaukunst in Regnitzfranken*. Würzburg-Aumühle, 1940.
- Barth (P.) *Die Stoa*. 5. Aufl. bearb. v. A. Goldeckemeyer. Stuttgart, 1941. (Fromm. Klass. d. Phil. 16).
- Baus (K.) *Der Kranz in Antike und Christentum*. Bonn, 1940. (Theophrasta, 2).
- Becker (O.) *Plotin und das Problem der geistigen Aneignung*. Berlin, 1940. (Gruyter).
- Bericht über den 6. Internationalen Kongress für Archäologie. Berlin, 21–26 August 1939. Berlin, 1940. (Gruyter).
- Berve (H.) *Das neue Bild der Antike*. Leipzig, 1942.
- Bettini (S.) *Byzantinische Mosaiken*. Berlin, 1941. (Sammlung Parthenon).
- Bissing (F. W. v.) *Der Fussboden aus dem Palaste des Königs Amenophis IV zu El Hawata*. München, 1940.
- *Zeit und Herkunft der in Cervetri gefundenen Gefässe aus ägyptischen Fayence und glasierten Ton*. München, 1941. (Bay. Akad.).
- *Die Baugeschichte des südlichen Tempels von Buhen (bei Wadi Halfa)*. München, 1942. (Beck).
- Bittel (K.), Naumann (R.) and Otto (H.) *Yazilikaya. Architektur, Felsbilder, Inschriften, und Kleinfunde*. Leipzig, 1941. (Wiss. Ver. d. dt. Orient. Ges. 61). (Hinrichs).
- Blanckenhagen (P. H.) *Flavische Architektur und ihre Dekoration, untersucht am Nervaforum*. Berlin, 1940. (Mann).
- Blinkenberg (C.) and Kinch (K. F.) *Lindos; Fouilles et recherches, 1902–1914. II. Inscriptions. t. 1–2*. Berlin, 1941.
- Bloesch (H.) *Formen Attischer Schalen von Exekias bis zum Ende des Strengen Stils*. Bern-Bumpliz, 1940. (Benteli).
- *Agalma: Kleinod, Weihgeschenk, Götterbild*. Bern-Bumpliz, 1943.
- Bluemel (C.) *Griechische Bildhauer an der Arbeit*. Berlin, 2nd ed. 1940; 3rd ed. 1943. (Gruyter).
- *Griechische Skulpturen des 6. u. 5. Jh. v. Chr. T. 1*. Berlin, 1940. (Verl. f. Kunstwiss.).
- Boehlau (J.) *See Larisa am Hermos*.
- Boniver (D.) *Abendländische Baukunst; eine Baugeschichte in Beispielen*. Leipzig, 1940.
- Bossert (H. Th.) *Volkskunst in Europa*. Berlin, 1941.
- *Altanatolien. Kunst u. Handwerk in Kleinasien v. d. Anfängen bis zum völligen Aufgehen in d. griech. Kultur*. Berlin, 1942. (Die ältesten Kulturen des Mittelmeerkreises, 2). (Wasmuth).
- Breitenstein (N.) *Catalogue of terracottas—Cyprische, Griech., Etrusco-Italian and Roman*. Kopenhagen—Leipzig, 1941. (Harrassowitz).
- Budde (E. G.) *Armerium. Ein Beitr. zur Gesch. d. antiken Mobiliars*. Würzburg, 1940. (Triltsch).
- Buschor (E.) *Griechische Vasen*. München, 1940. (Piper).
- *Die Tyrannen-Mörder*. München, 1940. (Bayer. Akad. d. Wiss.).
- *Meer männer*. München, 1941. (Bayer. Akad. der Wiss.).
- *Die Plastik der Griechen*. 2. Aufl. Berlin, 1942. (Rembrandt-Verl.).
- *Von Sinn der griechischen Standbilder*. Berlin, 1943. (Mann).
- Corti (E. C.) *Untergang u. Auferstehung von Pompeji u. Herculaneum*. 2. Aufl. München, 1940.
- Dehn (W.) *Kreuznach. T. 1–2*. Berlin, 1941. (Kataloge west-u. suddt. Altertumsammlgn. 7).
- Delbrueck (R.) *Die Münzbildnisse von Maximus bis Carinus*. Berlin, 1940. (Mann).
- Diem (K.) *Das trojanische Reiterspiel*. Berlin, 1942.
- Doerner (F. K.) *Inschriften und Denkmäler aus Bithynien*. Berlin, 1941. (Istanbuler Forschungen, 14).
- Doerpfeld (W.) *Erechtheion. Zeichnungen u. Bearb. v. H. Schleif*. Berlin, 1942.
- Ducati (P.) *Die etruskische, italo-hellenistische u. römische Malerei*. Wien, 1941 (Gesch. d. tal. Malerei in Einzeldarstellungen). (Deuticke).
- *Etruskische Plastik*. Berlin, 1942. (Guenther).
- Duhn (F.) *Italische Gräberkunde*. Heidelberg, 1939.
- Dunbar (F.) *Rom: Sechshundert Bauwerke der Ewigen Stadt*. Berlin, 1943.
- Eissfeldt (O.) *Tempel und Kulte syrischer Städte in hellenistisch-römischer Zeit*. Leipzig, 1941. (Hinrichs).
- Erdrniss (J.) *Die Chauken, ihre räumlichen Abgrenzung auf Grund der Bodenfunde*. Würzburg, 1940.
- Erzen (A.) *Kilikien bis zum Ende der Perserherrschaft*. Leipzig, 1940. (Diss.).
- Falkenstein (A.) *Topographie von Uruk. T. 1: Uruk zur Seleukidenzeit*. Leipzig, 1941. (Harrassowitz).
- Festgabe zur Winkelmannsfeier d. Arch. Sem. d. Univ. Leipzig, 1940.
- Fischer (L.) *Die Herstellung der Alexander Münzen: Zur antiken Prägetechnik*. Berlin, 1942. (Deutsche Münzblätter).
- Frauenfelder (R.) *Die Geburt des Herrn: Entwicklung u. Wandlung des Weihnachtsbildes v. christl. Altertum bis zum Ausgang d. Mittelalters*. Leipzig, 1939.
- Fremersdorf (F.) *Römische Gläser aus Köln*. 2. Aufl. Köln, 1939. (Schr. d. röm.-germ. Abt. d. Wallraf-Richartz-Mus. Köln 2).
- Friedrich (J.) *Entzifferungsgeschichte der hethitischen Hieroglyphenschrift*. Stuttgart, 1940. (Die Welt als Geschichte. Sonderh. 3).
- *Hethitisches Elementarbuch, I. Teil: Kurzgefasste Grammatik*. Heidelberg, 1940. (C. Winter).
- Friedrich, Meyer, Ungrad, and Weidner. *Die Inschriften von Tell Halaf. AfO. Beiheft 6*. Berlin, 1940. (Weidner).
- Frobenius (L.) *Monumenta Africana*. Neudr. Weimar, 1939. (Veröff. d. Forschungsinst. f. Kulturmorphol. a.d. Univer. Frankfurt a. M.).
- Gaebler (H.) *Fälschungen makedonischer Münzen*. Berlin, 1942. (Akad. d. Wiss.). (Gruyter).
- Gautner (J.) *Romanische Plastik*. Wien, 1941.
- Geistige Ueberlieferung. Ein Jahrbuch. In Verbindung mit Walter F. Otto und K. Reinhardt hrsg. von Ernesto Grassi. Berlin, 1940.
- Gerkan (A. v.) *Der Stadtplan von Pompeji*. Berlin, 1940.
- Gerke (F.) *Die christlichen Sarkophage der vor-konstantinischen Zeit*. Berlin, 1940. (Gruyter).



- Christ in der spätantiken Plastik. Berlin, 1941.
- Das heilige Antlitz: Köpfe altchristlicher Plastik. Berlin, 1940. (Kupferberg).
- Ideengeschichte der ältesten christlichen Kunst. (Zs. f. Kirchengesch. 59, 1/2). 1940.
- Goessler (P.)** Tabula Imperii Romani. Frankfurt a. M., 1940.
- Goetze (B.)** Ein römisches Rundgrab in Falerii. Stuttgart, 1939. (Kohlhammer).
- Golddeckemeyer (A.)** See Barth.
- Gross (W. H.)** Bildnisse Traians. Berlin, 1940. (Das römische Herrscherbild II abt., bd 2). (Mann).
- Hampe (R.)** Der Wagenlenker von Delphi. München, 1941. (Brunn-Bruckmann: Denkmäler griech. u. röm. Skulptur, 786-790, Lfg. 158).
- Haupt (G.)** Die Farbensymbolik in der sakralen Kunst des abendländischen Mittelalters. Dresden, 1941.
- Hege (W.)** See Rodenwaldt.
- Hekler (A.)** Bildnisse berühmter Griechen. Berlin, 1940.
- Hennig (R.)** Das vor- und frühgeschichtliche Altertum in seinen Kultur- und Handelsbeziehungen. Leipzig, 1941.
- Hermann (A.)** Die Stelen der Thebanischen Felsgräber der 18. Dynastie. Glückstadt, 1940. (Ägyptol. Forschungen, 11).
- Hermann (A.)** und **Schwan (W.)** Aegyptische Kleinkunst. Berlin, 1940.
- Hetzer (T.)** Giotto: seine Stellung in der europäischen Kunst. Frankfurt a. M., 1941.
- Hirmer (M.)** Die schönsten Griech. Münzen Siziliens. Leipzig, 1940. (Insel-Bucherei, 559).
- Hunke (W.)** Die Trojaburgen und ihre Bedeutung. München, 1941. (Diss.).
- Inscriptiones Graecae. Vol. 2 et 3 ed. minor, pars 3, f. 2; Inscriptiones Atticae, Euclidis anno posteriores (by J. Kirchner). Berlin, 1940. (Gruyter).
- Ippel (A.)** Wirkungen griechischer Kunst in Asien. Leipzig, 1940. (Der Alte Orient 39, 1-2). (Hinrichs).
- Jantzen (H.)** Deutsche Plastik des 13. Jahrhunderts. München, 1941.
- Jenny (W. A. v.)** Die Kunst der Germanen im frühen Mittelalter. Berlin, 1940.
- Jersch (H.)** Untersuchungen zum Stile Winckelmans mit besonderer Berücksichtigung der Geschichte der Kunst des Altertums. Calw, 1939.
- Jirku (A.)** Die ältere Kupfer-Steinzeit Palästinas und der bandkeramische Kulturkreis. Berlin, 1941. (Gruyter).
- Junker (H.)** Die Götterlehre von Memphis. Berlin, 1940. (Gruyter).
- Giza IV: Die Mastabe des Kai-em-anch. Giza V: Die Mastabe von Seneb und die umliegenden Gräber. Wien, 1940 and 1941.
- Kauffmann (F. A.)** Roms ewiges Antlitz. Berlin, 1940.
- Kees (H.)** Der Götterglaube in alten Ägypten. Leipzig, 1941. (Hinrichs).
- Kerameikos II:** Die Skulpturen vom 5. Jahrhundert bis in römische Zeit (by **Hans Riemann**). Berlin, 1940. (Gruyter).
- Kerameikos III:** Inschriften, Ostraka, Fluchtafeln (by **Werner Peek**). Berlin, 1941.
- Kerameikos IV:** Neufunde aus der Nekropole des 11. und 10. Jahrhunderts (by **Karl Kübler**). Berlin, 1943.
- Kimming (W.)** Die Urnenfelderkultur in Baden, untersucht auf Grund der Gräberfunde. Berlin, 1940. (Röm.-Germ. Forschungen, 14). (Gruyter).
- Kirsten (E.)** Das dorische Kreta. Teil I: Die Insel Kreta in fünften und vierten Jahrhundert. Würzburg, 1942. (Triltsch).
- Kleinasiatische Studien**, von **Kurt Bittel**. Istanbul, 1942. (Istanbuler Mitteilungen, herausgegeben von der Abteilung Istanbul des Archäologischen Institutes des Deutschen Reiches. Heft 5).
- Kleine Kostbarkeiten aus Kunst und Geschichte.** Hrsg. v. J. O. Plassmann. Berlin, 1940.
- Kleiner (G.)** Der Altar von Pergamon. Berlin, 1940.
- Tanagrafiguren; Untersuchungen zur hellenistischen Kunst u. Geschichte. Berlin, 1942. (Gruyter).
- Knackfuss (H.)** Die Baubeschreibung des Heiligtums des Apollon von Didyma. Berlin, 1941. (Didyma 1).
- Kollwitz (J.)** Oströmische Plastik der Theodosianischen Zeit. Berlin, 1941. (Stud. z. spätantiken Kunstgeschichte 12).
- Kopp (C.)** Grabungen und Forschungen im Heiligen Land 1867-1938. Köln, 1939. (Palästina-Hefte d. Dt. Ver. v. Heil. Lande H. 21/23).
- Krause (K.)** Bogasköy, Tempel V; Ein Beitrag zur Problem des hethitischen Baukunst. Berlin, 1940. (Istanbuler Forsch. 11).
- Krauss (F.)** Paestum, die griechischen Tempel. Berlin, 1941. (Bildern ant. Kunst, H. 8). (Mann).
- Krenn (K.)** Das frühdeutsche Gräberfeld von Steina-brunn. Leipzig, 1939.
- Krischen (F.)** Die Stadtmauern von Pompeji und griechische Festungs-Baukunst in Unteritalien und Sizilien. Berlin, 1941. (Die hellenistische Kunst in Pompeji 7). (Gruyter).
- Antike Rathäuser, Unter Mitarb. v. **Watzinger u. von Gerkan**. Berlin, 1941. (Mann).
- Kruger (C.)** Der fliegende Vogel in der antiken Kunst bis zur klassischen Zeit. Münster i. W., 1940. (Diss.).
- Lange (K.)** Ägyptische Kunst. Berlin, 1939.
- Götter Griechenlands; Meisterwerke antiker Münzkunst. Berlin, 1941.
- Münzkunst des Mittelalters. Leipzig, 1942.
- Langen (A.)** Kunstwerke in dichterischer Deutung: Eine Auswahl von Winckelmann bis Burckhardt. Dresden, 1940.
- Langer (M.)** Keramische Kunst. Pinneberg b. Hamburg, 1939.
- Langlotz (E.)** Die Darstellung des Menschen in der griechischen Kunst. Bonn, 1941. (Bonner Univ. Buchdr.).
- Langlotz (E.)** und **Schuchhardt (W. H.)** Archaische Plastik auf der Akropolis. Frankfurt am Main, 1941. (Klostermann).
- Lappo-Danilowski (O.)** Untersuchungen über den Innenraum der archaischen griechischen Tempel. Würzburg, 1942. (Diss. Giessen).
- Larisa am Hermos; Die Ergebnisse der Ausgrabungen, 1902-34.** T. I.—Die Bauten (by **Boehlau (J.)** and **Schefold (K.)**). Berlin, 1940. (Gruyter).
- T. II.—Die architektonischen Terrakotten (by **Kjellberg (L.)** and **Akerström (Ake)**). Stockholm, 1940. (Kgl. Vitterh. Hist. och Ant. Akad.).
- T. III.—Die Kleinfunde. Berlin, 1942. (Gruyter).
- Lemmer (K.)** Grosses schönes Italien: Führer durch Florenz und Rom. Berlin, 1941.
- Lenzen (H. J.)** Ausgrabungen in Uruk-Warka. T. 2. Die Entwicklung des Eanna-Heiligtums von der Frühzeit bis zum Ausklang der seleukidischen Zeit. — Die Entwicklung der Zikurrat von ihren Anfängen bis zur Zeit der III. Dynastie von Ur. Leipzig, 1941. (Ausgrabungen d. Dt. Forschungsgemeinschaft in Uruk-Warka, 4).
- Lorch (C. v.)** Akropolis: 60 Bilder, mit umleitenden Text v. Carl v. Lorch. Berlin, 1940. (Kanter).
- Luschan (F.)** Die Kleinfunde von Sendschierli. Hrsg. v. W. Andrae. Berlin, 1943. (Gruyter).
- Lutzeler (H.)** Führer zur Kunst. Freiburg i. B., 1941.
- Die Kunst der Völker. Freiburg i. B., 1941.
- Vom Sinn der Bauformen. Freiburg i. B., 1941.



# BIBLIOGRAPHIES OF BOOKS PUBLISHED SINCE THE OUTBREAK OF THE WAR 213

- Manns (F.)** Münzkündliche u. historische Untersuchungen über die Zeit der Illyrerkaizer Aurelianus. Würzburg, 1939.
- Marehl (H.)** Eduard Meyer. Stuttgart, 1941.
- Meier (T.)** Das Wesen der spartanischen Staatsordnung, nach ihren lebensgesetzlichen und bodenrechtlichen Voraussetzungen. Leipzig, 1940. (Dietrich).
- Meissner (B.) and Opitz (D.)** Studien zum Bit Hilani in Nordpalast Assurbanipals zu Ninive. Berlin, 1940. (Gruyter).
- Menghin (O.)** Weltgeschichte der Steinzeit. 2. Aufl. Wien, 1940.
- Mentz (A.)** Ein Schülerheft mit altgriechischer Kurzschrift. Bayreuth, 1940. (Bauverlag Bayerische Ostmark).
- Miltner (F.)** Das zweite Amphitheater von Carnuntum. 4. erw. Aufl. Baden, 1939.
- Moortgat (A.)** Vorderasiatische Rollisiegel. Ein Beitrag z. Gesch. d. Steinschneidekunst. Berlin, 1940. (Mann).
- Morath (G. W.)** Die Maximianskathedra in Ravenna. Freiburg i. B. 1940. (Freiburger Theol. Stud. h. 54).
- Mortel (H.)** Antike Bauerngeschichten. Goslar, 1941. (Goslarer Volksb. 6).
- Mueller (H. W.)** Die Felsengräber der Fürsten von Elephantine aus der Zeit des mittleren Reiches. Glückstadt, 1940. (Ägypt. Forsch. 9). (Augustin).
- Mueller (H.)** Zur Problematik des Stils in der Kunstgeschichte. Würzburg, 1940.
- Mueller (R.)** Zum Problem der Ontologie der Kunst. Essen, 1940.
- Neusch (B.)** Der Maler Nikias von Athen. Bernaleipzig, 1939.
- Offermann (R.) and Voss (J.)** Mittelrheinische Bildnisplastik aus 3 Jahrhunderten. Berlin, 1942.
- Ohlemutz (E.)** Die Kulte und Heiligtümer der Götter in Pergamon. Würzburg, 1940. (Triltsch).
- Ostrogorsky (G.)** Geschichte des byzan. Staates. München, 1940. (Handbuch der Altertumswiss. Abt. 12, T. 112). (Beck).
- Paatz (W.) and (E.)** Die Kirchen von Florenz. Frankfurt a. M., 1939-42. (Klostermann).
- Passarge (S.)** Die Urlandschaft Ägyptens und die Lokalisierung der Wiege der altägyptischen Kultur. Halle, 1940.
- Peek (W.)** Inschriften, Ostraka, Fluchtafeln. Berlin, 1941. (Kerameikos 3).
- Pemp (R.)** Drei Wasserhebwerke Pompejis. Würzburg-Aumühle, 1939.
- Peterich (E.)** Göttinnen im Spiegel der Kunst. Frankfurt a. M., 1941.
- Peters (H.)** Dome und Kathedralen. Berlin, 1941.
- Studien zu den panathenäischen Preisamphoren. Berlin, 1942. (Schriften zur Kunst des Altertums 2).
- Pfannenstiel (M.)** Die altsteinzeitlichen Kulturen Anatoliens. Berlin, 1941. (Istanbuler Forschungen, 15).
- Pfister (K.)** Die Etrusker. München, 1940.
- Pfuhl (E.)** Tausend Jahre Griechischer Malerei. München, 1940.
- Rademacher (F.)** Frankische Goldscheibenfibeln aus dem rheinischen Landes-Museum in Bonn. München, 1940. (Bruckmann).
- Rehm (W.)** Winckelmann und Lessing. Berlin, 1941.
- Reutern (J. v.)** Hellas: Ein Führer durch Griechenland aus antiken Quellenstücken. München, 1941.
- Rieman (H.)** Die Skulpturen vom 5. Jh. bis in römische Zeit. Berlin, 1940. (Kerameikos 2).
- Riemschneider-Hoerner (M.)** Der Wandel der Gebärde in der Kunst. Frankfurt a. M., 1939.
- Rodenwaldt (G.)** Griechische Tempel. Aufgenommen von Walter Hege. Berlin, 1941. (Deutscher Kunstverlag).
- Kunst um Augustus. Berlin, 1942. (Gruyter).
- Rohde (L.)** St. Marie zu Greifswald. Berlin, 1940.
- Ruchel (W.)** Griechisches Goldrelief. Berlin, DAI. 1942.
- Schadewaldt (W.)** Winckelmann und Homer. Leipzig, 1941. (Lozger Universitätsreden 6).
- Schaffran (E.)** Die Kunst der Langobarden in Italien. Jena, 1941.
- Schawen (R. v.)** Römische Opfergeräte, ihre Verwendung im Kultus und in der Kunst. Berlin, 1940. (Archäol. Stud. H. 1).
- Scharff (A.)** Die Frühkulturen Ägyptens und Mesopotamiens: Ein Vertrag. Leipzig, 1941. (Hinrichs).
- Wesenunterschiede ägyptischer und vorderasiatischer Kunst. Leipzig, Hinrichs, 1943. (Der Alte Orient 42).
- Schleif (H.)** Korkyra, I; Der Artemistempel, Architektur, Dachterrakotten, Inschriften (by H. Schleif, K. A. Rhomaios, G. Klaffenbach). Berlin, 1940. (Mann).
- Schlicker (F. W.)** Hellenistische Vorstellungen von der Schönheit des Bauwerks nach Vitruv. Berlin, 1940. (Schr. z. Kunst d. Altertums 1).
- Schmidt (W.)** Das Eigentum auf den ältesten Stufen der Menschheit; Bd. 2: Das Eigentum im Primärkulturkreis der Herdenviehzüchter Asiens. Münster, 1940.
- Schmitz (H.)** Ausstellung: Die Antike im Spiegel Darstellungen und Schriften v. 1500-1850. Berlin, 1939.
- Die Staatliche Kunstbibliothek in Berlin: ihre Gliederung, ihre Bestände. Berlin, 1940.
- Schneider (K.)** Thetis in Verwandlungskampf mit Peleus in der griechischen Vasenmalerei. Breslau, 1941. (Diss.).
- Schneider (M. M.)** Die Grabung im Westhof der Sophienkirche zu Istanbul. Berlin, 1941. (Istanbuler Forschungen 12).
- Schoergendorfer (A.)** Die Römerzeitliche Keramik der Ostalpenländer. Brunn-München, 1942. (Sonderschr. hrsg. v. d. Zweigstelle Wien d. Archäol. Inst. d. Dt. Reiches 13).
- Schuchhardt (C.)** Alteuropa, die Entwicklung seiner Kulturen und Völker. 4 erg. Aufl. Berlin, 1941. (Gruyter).
- Schuchhardt (W. H.)** Archaische Giebelkompositionen. Freiburg i. B., 1940. (Schulz).
- Geschichte der Kunst. Bd. I: Altertum. T. 1: Die Kunst der Griechen.
- Griechische Plastik. Berlin, 1940. (Das Meisterwerk. R. Plast).
- Die Kunst der Griechen. Berlin, 1940.
- Schumacher (J.)** Antike Medizin. I. Berlin, 1940. (Gruyter).
- Schweinfurth (P.)** Die Wandbilder der Kirche von Bojano. Berlin, 1943.
- Schweitzer (B.)** Studien zur Entstehung des Porträts bei den Griechen. Leipzig, 1940. (Herg. über d. Verh. d. Sachs. Akad. d. Wiss. 91, 1939) (Hirzel).
- Dirke. Zur Kunst des Apollonios und des Tauriskos. Leipzig, 1940.
- Seewald (O.)** Der Vogelwagen vom Glasinac. Leipzig, 1939. (Prähistorica H. 4).
- Seracsin (A.)** Die römischen Gräberfelder von Loretto und Leithaprodersdorf, Lkr. Eisenstadt. Wien, 1940. (Niederdonau, Natur u. Kultur 4).
- Spieß (E.)** Die Kulturen der Urzeit und des Mittelmeerraums. Einsiedeln, 1940. (Benzinger).
- Stippel (F.)** Ehre und Ehrenziehung in der Antike.



- Würzburg, 1939. (Kulturphilos., philosophiegesch. u. erziehungswiss., Stud. 7).
- Strzygowski (J.)** Die deutsche Nordsee: Das Bekenntnis e. Kunstforschers. Wien-Leipzig, 1940.
- Studien zur Vor- und Frühgeschichte. Carl Schuchhart zum 80. Geburtstag dargebr. Berlin, 1940.
- Sundwall (J.)** Die älteren italischen Fibeln. Berlin, 1943. (Gruyter).
- Swoboda (E.)** Forschungen am obermoesischen Limes. Wien-Leipzig, 1939. (Schr. d. Balkankomm. Antiquar. Abt. 10).
- Technau (W.)** Geschichte der Kunst. Bd. I. Altertum. T. 2: Kunst der Römer. Berlin, 1940.
- Terra (H. de)** Durch Urwelten am Indus. Leipzig, 1940. (Brockhaus).
- Thomae (W.)** Thüringische Kunstgeschichte. Jena, 1942.
- Urgeschichte des Menschen. Frühzeit der Völker, Reiche des Altertums. Bearb. von H. Weinert (u. a.). Berlin, (Propyläen-Verl.). 1940.
- Vasmer (M.)** Die Slaven in Griechenland. Berlin, 1941. (Gruyter).
- Vogt (G.)** Körperbildung und darstellende Kunst in Griechenland. Bonn, 1940.
- Waetzold (W.)** Jacob Burckhardt als Kunsthistoriker. Leipzig, 1940. (Kl. Buch. z. Geistesgesch. 8).
- Welter (G.)** Troizen und Kalaureia. Berlin, 1941. (Mann).
- Wersin (W.)** Das elementare Ornament und seine Gesetzmäßigkeit. Ravensburg, 1940.
- Wessling (G.)** Das Gesetz der Baukunst. Dortmund, 1941.
- West (R.)** Römische Porträt-Plastik. München, 1941.
- Wiegand (T.)** Didyma. Teil I. Die Baubeschreibung. 3 Bde. von H. Knackfuss. Berlin, 1941. (Mann).
- Wiesner (J.)** Fahren und Reiten in Alteuropa und im Alten Orient. Leipzig, 1939. (Der Alte Orient 38, 2/4).
- Wiessner (K.)** Bauformen der Ilias. Leipzig, 1940. (Preisschr. d. F. Jablonowsk. Ges. zu Leipzig, 55).
- Wilhelm (A.)** Attische Urkunden. T. 5. Wien, 1942. (Akad. d. Wiss.).
- Zu der Urkunde der in Jahre 307/6 v. Chr. von Deinarchos beauftragten Wiederherstellung der Mauern Athens. Berlin, 1941.
- Willmsen (F.)** Frühe griechische Kultbilder. Würzburg-Aumühle, 1939.
- Wilm (H.)** Die gotische Holzfigur: ihr Wesen und ihre Entstehung. Stuttgart, 1940.
- Woelfflin (H.)** Das Erklären von Kunstwerken. Leipzig, 1940.
- Wolfer-Sulzer (L.)** Das geometrische Prinzip der griechisch-dorischen Tempel. Winterthur, 1939.
- Wolters (P.)** Das Kabirenheiligtum bei Theben. (Fertig-gestellt v. G. Bruns, Bd. 1). Berlin, 1940. (Gruyter).
- Wuertenberger (T.)** Das Kunstfälschertum. Weimar, 1940. (Forschgn. z. Gesch. d. dt. Strafrechts 2).
- Zschietzschmann (W.)** Die Blütezeit der griechischen Kunst. Giessen, 1940. (Schr. d. Ludwigs-Univ. zu Giessen. Kg. 1940. H. 1).
- Züchner (W.)** Griechische Klappspiegel. Berlin, 1942. (Gruyter).
- ITALY**
- Albizzati (C.)** Antichità classiche, Milano, 1940.
- Vasi antichi dipinti del Vaticano, Milano, 1940.
- Arias (P. E.)** Mirone (Quaderni per lo studio dell'archeologia 2) Firenze, 1940.
- Il Museo Archeologico Nazionale di Siracusa. (Corpus Vasorum Antiquorum Italicorum, 17) Rome, 1941.
- La Scultura romana. Città di Castello, 1943.
- Storia della scultura romana. (Bibl. di cultura contemporanea 4) Messina, 1941.
- Atti del IV Congresso Internazionale di Archeologia Cristiana. Città del Vaticano, 16-22 Ottobre 1938: Vol. 1<sup>o</sup>. (Studi di antichità cristiana, 16) Roma, 1940.
- Atti del V Congresso Internazionale di Studi Bizantini. Roma, 20-26 Settembre 1936. 1. Storia. Filologia. Diritto. 2. Archeologia e Storia dell'arte. Liturgia e Musica. (Studi Bizantini e Neoeellenici 5-6), Roma, 1939-40.
- Atti del V<sup>o</sup> Congresso Nazionale di Studi Romani. Roma, 1940.
- Atti del 3<sup>o</sup> Convegno Nazionale di Storia dell'Architettura. Roma, 9-13 Ottobre 1938. Roma, 1940.
- Aurigemma (S.)** Velleia. (Itin. d. Musei e Monumenti d'Italia 73) Roma, 1940.
- Barreca (C.)** Affreschi e opere più notevoli delle catacombe di Siracusa con la pianta planimetrica. Roma, 1939.
- Becatti (G.)** Musei comunali umbri di Orvieto (Opera del Duomo) Spoleto, Terni, Bettona, Todi. (Corpus Vasorum, Italia 16) Roma, 1940.
- Bindinelli (G.)** Le pitture del Columbario di Villa Pamphili. (Monumenti di pittura antica scoperti in Italia. Sez. III: Roma, Fasc. 5) Roma, 1941.
- Beretta (A. U.)** Castelli romani nel quadro del piano regolatore di Roma imperiale. Roma, 1940.
- Bernabo' Brea (L.)** Museo Civico d'Archeologia Ligure di Genova-Pegli a collezione del Castello d'Albertis di Genova. Faso. 1. (Corpus Vasorum Antiquorum. Italia 19) Roma, 1942.
- Bernardini (M.)** I ritrovamenti archeologici di Lecce, Lecce, 1941.
- Bettini (S.)** Pittura delle origini cristiane. Novara, 1942.
- Bianchi-Bandinelli (R.)** Storicità dell'arte classica. Firenze, 1943.
- Blanc (A. C.)** I più antichi giacimenti paleolitici del Lazio. L'Italia dalla preistoria alla romanizzazione 2. Roma, 1941 (Quaderni di Studi Romani).
- Borghi (M. N.)** La basilica di S. Vittore in Ravenna prototipo delle costruzioni esarcali. Milano, 1941.
- Cagliano De Azevedo (M.)** Le strade. (Civiltà Romana 13. Mostra della Romanità), Roma, 1939.
- Un sarcofago di Villa Medici con scena di iniziazione baccica. (R. Ist. d'archeologia e Storia dell'Arte. Opere d'arte 13) Roma, 1942.
- Calza (G.)** La Necropoli del porto di Roma nell'Isola Sacra. Roma, 1940.
- Caraffa (G.)** La Cupola della sala decagona degli Horti Liciniani. Roma, 1944.
- Castelli (I.)** Romani nel quadro del Piano Regolatore di Roma Imperiale. Roma, 1940.
- Catalogo della Mostra preistorica dell'antica Messapia. A cura di L. Cardini e C. Drago. Lecce, 1939.
- Cecchelli (C.)** Monumenti cristiano-ereticici di Roma. Roma, 1943.
- Colini (A. M.)** Stadium Domitiani. (I Monumenti Romani) Roma, 1943.
- Consortini (L.)** Volterra nell'antichità ossia Volterra italica, etrusca e romana. (Bibl. d. "Rassegna Volterrana" 4). Volterra, 1940.
- Della Corte (M.)** Piccola Guida di Pompei. 1930.
- De Vries (W.)** Sakramententheologie bei den syrischen Monophysiten. (Orient. christ. analecta 125) Roma, 1940.
- Donadoni (S.)** La civiltà egiziana. Milano-Messina, 1940.
- Drago (C.)** R. Museo Nazionale di Taranto 2. (Corpus Vasorum Antiquorum. Italia 18) Roma, 1942.



- Fabrizi (E.)** Piccola guida turistica di Ravenna antica. Ravenna, 1940.
- Fasolo (G.)** Guida del Museo Civico di Vicenza. Vicenza, 1940.
- Ferretto (G.)** Note storico-bibliografiche di archeologia cristiana. Città del Vaticano, 1942.
- Ferrua (A.)** Il Mitreo di Santa Prisca (Mon. di Roma 3). Roma, 1941.
- Galassi (G.)** Tehenu e le origini mediterranee della civiltà egizia. Roma, 1942.
- Gerlini (E.)** La Farnesina, piccola guida, Roma, 1941.
- Koethe (H.)** Scavi e ritrovamenti d'interesse romano nella Germania occidentale e meridionale. (Ist. di Studi Romani. Orme di Roma nel Mondo 4) Roma, 1940.
- Krautheimer (R.)** Corpus Basilicarum Christianarum Romae. Roma, 1940.
- Laviosa Zambotti (P.)** Carta archeologica delle stazioni enee emiliane a occidente del Reno. Milano, 1939.
- Le più antiche civiltà nordiche ed il problema degli Indo-europei e degli Ugro-Finni (R. Univ. di Milano. Fac. di Lettere e Filosofia, Ser. 4) Milano-Messina, 1941.
- Lugli (G.)** Guida del Museo Civico di Terracina. Roma, 1940.
- I monumenti antichi di Roma e Suburbio, Supplemento: Un decennio di scoperte archeologiche, Roma, 1940.
- Magi (F.)** La raccolta Benedetti Guglielmi nel Museo Gregoriano-Etrusco. Pte. 2a: Bronzi e oggetti vari. Città del Vaticano, 1941.
- Maiuri (A.)** Passeggiate campane. 2a serie. Milano, 1940.
- Mancini (G.)** Il calendario (Mostra della Romanità. Civiltà romana 19) Roma, 1941.
- Manoel (H.)** Disegni di teatro. Bühnenbilder. Dessins de théâtre. Rome, 1943.
- Maselli (G.)** Le città sannitiche. Isola del Liri, 1940.
- Mayence (F.)** Scavi recenti in Apamea di Siria: la città romana (Ist. di Studi Romani. Orme di Roma nel Mondo 2). Roma, 1940.
- Monaco (G.)** Il R. Museo di antichità di Parma. Roma, 1940.
- Monneret De Villard (U.)** Le chiese della Mesopotamia. (Orientalia Christiana analecta 128) Roma, 1940.
- La Nubia Romana (Pubbl. dell'Ist. per l'Oriente) Roma, 1941.
- Monti Della Corte (A. A.)** Lalibela. Le Chiese ipogee. Roma, 1940.
- Montrasio (A.)** Le basiliche preambrosiane. I sepolcri dei SS. Vitore e Satiro. Milano, 1940.
- Monumenta Epigraphica Christiana Saeculo XIII antiquiora quae in Italiae finibus adhuc extant iussu Pii XII edita curante Angelo Silvagni.** Vols. 4 in 6 tomi. Città del Vaticano, 1943.
- Moretti (B.)** Ville, Seconda parte. 70 disegni di ville e case di campagna, Milano, 1942.
- Muratori (S.)** I mosaici di S. Vitale in Ravenna. (I grandi cicli pittorici) Bergamo-Milano, 1942.
- Mustilli (D.)** Storia degli studi archeologici. Pt. I. Napoli, 1943.
- Occhini (B.)** L'arte classica e l'arte italiana dalle origini a tutto il Trecento. Vol. I. Torino, 1940.
- Olivero (E.)** Architettura religiosa preromanica e romanica nell'Archidiocesi di Torino. Torino, 1941.
- Palottino (N.)** Arte figurativa e ornamentale. (Mostra della Romanità, Civiltà romana 18) Roma, 1940.
- Studi sull'arte di Hermonax. (Atti d.R. Accad. d'Italia. Mem. Ser. 7, vol. 1, fasc. 1). Roma, 1940.
- Patroni (G.)** Architettura preistorica generale ed italiana. Architettura etrusca. (Storia dell'architettura 1) Bergamo, 1941.
- Pasquali (G.)** Medioevo bizantino. Firenze, 1941.
- Paterna Baldizzi (L.)** La prima chiesa di Roma. Roma, 1941.
- Peola (P.)** Protostoria e romanità dell'agro alessandrino. (Bibl. d. Dep. Subalp. d. Stor. Patro. Sez. d. Alessandria 17) Alessandria, 1940.
- Pietrangeli (C.)** Il Mitreo del Palazzo dei Musei di Roma (Monumenti di Roma 2). Roma, 1941.
- Oriculum. Gubbio, 1943.
- Il "Torrione" della via Prenestina. (Monumenti di Roma 6) Roma, 1941.
- Reggiori (F.)** La Basilica Ambrosiana, ricerche e restauri 1929-1940. Milano, 1941.
- Reina (P.)** Prospettiva. Leggi di prospettiva normale, Milano, 1940.
- Rendiconti della R. Accad. di Arch. Lettere e Belle Arti d. Soc. R. di Napoli, Vol. 20°, Anno 1940.**
- della R. Accad. Naz. dei Lincei. Notizie degli scavi di antichità. Ser. 6, vol. 15.
- della Pont. Accad. Rom. di Archeologia. Vol. 16°, Anno 1940.
- Rizzo (G. E.)** Ritratti di età ellenistica. (Monumenti di pittura antica scoperti in Italia. Sez. 3a. La Pittura ellenistica-romana. Centuripae, Fasc. 1) Roma, 1940.
- Romanelli (P.)** Il limes romano in Africa. (Ist. di Studi Romani, Il Limes romana 10) Roma, 1939.
- Tarquinia, la necropoli e il Museo. (Itinerari d. musei e mon. d'Italia, 75) Roma, 1940.
- Santangelo (P. E.)** Sostrati che non sono sostrati, ovvero liquidazione della teoria mediterranea. Milano, 1940.
- Sbordone (F.)** Hori Apollinis Hieroglyphica. Saggio introduttivo, edizione critica del testo e commento. Napoli, 1940.
- Schuster (I.)** Sant'Ambrogio e le più antiche basiliche milanesi. Milano, 1940.
- Sicilia Bizantina.** Vol. 1 di Paolo Orsi a cura di G. Agnello. Tivoli, 1942.
- Springer (A.)** Manuale di storia dell'arte. 4a Ed. riv. ed. da Corrado Ricci. 1. L'arte antica. Bergamo, 1942.
- Stefanini (L.)** Arte e critica. Milano-Messina, 1942.
- Stohlman (F.)** Gli smalti del Museo Sacro Vaticano. (Catalogo del Museo Sacro, Vol. 2°) Città del Vaticano, 1939.
- Straneo (V.)** L'arte in Liguria nelle sue vicende storiche. Torino, 1940.
- Teleilat Gassul II.** Compte rendu des fouilles de l'Institut Biblique Pontifical 1932-1936 par Robert Koeppl avec la collaboration de H. Senes. . . . (Scripta Pont. Instituti Biblici 87) Roma 1940.
- Tropea (C.)** Lineamenti di storia dell'arte antica. Torino, 1940.
- Vinaccia (G.)** Le problema dell'orientamento sull'urbanistica dell'antica Roma. (Istituto di Studi Romani. La scienza e la tecnica ai tempi di Roma imperiale 1) Roma, 1939.
- Vogliano (A.)** Un'impresa archeologica milanese ai margini orientali del deserto libico. Milano, 1942.

#### MEDIAEVAL, RENAISSANCE, MODERN

- Ambrosiana. Scritti di storia, archeologia ed arte pubbl. nel XVI Centenario della nascita di S. Ambrogio. Milano, 1942.
- Angelo dell'Oca Bianca** nell'arte e nella vita. Milano, 1940.
- Angioletti (G. B.)** Michele Cascella. Milano, 1942.
- 12 opere di Raffaele de Grada con testo di G.B.A. (Pittori italiani contemporanei). Milano, 1942.



- Annoni (A.)** L'Edificio sforzesco dell'Ospedale Maggiore di Milano e la sua rinascita. Milano, 1941.
- Anticipazioni**
1. Sant'Elia e l'architettura futurista.
  2. Picasso scultore.
  3. Lautreamont e il surrealismo.
  4. Appia e la scena costruita.
  5. Fotorealismo e Fotosurrealismo. Roma, 1944.
- Antologia pittorica dell'Arte Italiana dal XIV al XIX sec.** Introduzione di Ugo Nebbia. Bergamo, 1940.
- Apolloni (B. M.)** La casa dei Crescenzi nell'architettura e nell'arte di Roma Medioevale, Roma, 1940.
- Arata (G. U.)** Architettura medioevale in Sicilia. (Documentario Athenaeum fotografico). Novara, 1942.
- Costruzioni e progetti con albine note sull'architettura contemporanea. Milano, 1942.
- Ricostruzioni e restauri. Milano, 1942.
- Arslan (E.)** La Pittura e la scultura veronese dal sec. VIII al sec. XIII. Milano, 1943.
- Bagnoli (R.)** Le Chiese di Milano della storia e nell'arte. Vol. 1. Milano, 1942.
- Baratti (A.)** Raffaello. Alba, Ist. Miss. Pia Soc. S. Paolo, 1942.
- Barbarani (G.)** Pietro Rotari. Verona, "L'Albero", 1942.
- Bargellini (P.)** Via Larga. Milano, 1941.
- Barni (L.)** Albori del Cristianesimo in Vigevano e l'antica chiesa di S. Ambrogio, Vigevano, 1940.
- Baroni (C.)** L'architettura lombarda da Bramante al Richini. Questioni di metodo, Milano, 1941.
- Documenti per la storia dell'architettura a Milano nel Rinascimento e nel Barocco. Vol. I: Edifici vari. P. te Ia. Firenze, 1940.
- Maioliche di Milano, Milano, 1940.
- Barreca (C.)** Affreschi e opere più notevoli delle catacombe di Siracusa con la pianta planimetrica. Roma, 1939.
- Basilica di S. Ambrogio.** Milano, 1940.
- Bassi-Rathgeb (R.)** Vincenzo Borromini decoratore e pittore macabro del seicento. (Collana di monografie su artisti bergamaschi a cura della Banca Mutua Popolare di Bergamo). Bergamo, 1942.
- Beccaria (A.)** Gianfilippo Usellini. (Arte Mod. ital.) Milano, 1942.
- Bendinelli (G.)** Adolfo Venturi 1856-1941. Torino, 1941.
- Benedite L.; Fogolari G.; Pischel-Fraschini G.** La pittura dell'Ottocento. Milano, 1942.
- Bernardi (M.)** Gregor Sciltian. Milano, 1941.
- Lorenzo Delleani (1840-1908). Torino, 1940.
- Bernasconi (U.)** Francesco Messina (Arte Moderna straniera a cura di G. Scheiwiller N. 28—Serie B. Scultori N. 6). Milano, 1942.
- Bertarelli (A.)** Le incisioni di Giuseppe M. Mitelli, Catalogo critico. Milano, 1940.
- Bertini Calosso (A.)** Ritratti e Madonne di Raffaello. Novara, 1941.
- Bettini (S.)** Pitture cretesi-veneziane slave e italiane del Museo Nazionale di Ravenna. Ravenna, 1940.
- Biagetti (B.)** Le Pitture murali di Melozzo da Forlì et le loro vicende, Roma, 1941.
- Biagi (L.)** Lorenzo Lotto, Roma, 1942.
- Birrolli (R.)** Renato Birrolli. 30 tavole e disegni con scritti dell'artista e uno studio di S. Bini, Milano, 1941.
- Bollea (L. C.)** Lorenzo Pecheux maestro di pittura nella R. Accademia di Belle Arti di Torino. Torino, 1942.
- Bonzi (M.)** Il Biscaino. Savona, 1940.
- Boretti (M.)** Il Castello di Cosenza (Storia e Arte). Cosenza, 1940.
- Bosi (G.)** La Chiesa di Santa Croce al quartiere Flaminio. Roma, 1940.
- Bovini (G.)** La statua di S. Ippolito del Museo Lateranense. Roma, 1941.
- Brandi (C.)** Mostra di dipinti acquistati dallo Stato per la R. Pinacoteca di Siena. Seguace di Segna. Giovanni di Paolo. Benvenuto di Giovanni. Andrea del Brescianino. Catalogo a cura di C. Brandi. Roma, 1942.
- Breschi (C.)** La Voce di un monumento (nel travertino nassano) Massa Marittima, 1940.
- Brizio (A. M.)** La Pittura in Piemonte dall'età romanica al Cinquecento. (R. Univ. di Torino. Pubblicazioni della Facoltà di Magistero, Serie I, vol. X). Torino, 1942.
- Brunetti (M.), Bettini (L.), Foslatti (F.), Fiocco (G.)** Torcello, Venezia, 1940.
- Brusin (G.)** Nuovi monumenti sepolcrali di Aquileia. (Ass. Naz. p. Aquileia. Quad. 1, 1941). Venezia, 1941.
- Buscaroli (R.)** L'Arte di Donatello. (Orientamenti. Collana di Studi sull'arte figurativa a cura di R. Buscaroli, 1). Firenze, 1942.
- Cabella Latuada (E.)** Una scuola pittorica tortonese. La Bottega di Basilio. (Univ. Cattolica del Sacro Cuore: Facoltà di Lettere e Filosofia: tesi di laurea). Milano, 1940.
- Caffarelli (G.)** La Distribuzione organica degli edifici e degli impianti di uso pubblico, Roma, 1939.
- Calderini (A.)** La Zona di Piazza S. Sepolcro. (Istituto di Studi Romani. Sez. Lombarda. Ricerche d. Comm. per la Forma Urbis Mediolani, 4).
- Callari (L.)** I Palazzi di Roma. Roma, 1944.
- Carli (E.)** Sculture del Duomo di Siena. Torino, 1940.
- Cecchelli (C.)** I Monumenti del Friuli dal secolo IV al XI. Vol. I. Cividale. Milano, 1943.
- Cecchi (E.)** Donatello, Roma, 1942.
- Creconi (G.)** Il "Bel S. Francesco" di Fermo nel settimo centenario della fondazione. Fermo, 1941.
- Cellamare (D.)** Pasquale Roma, gloria italiana nel mondo. Prime ricerche, Firenze, 1940.
- Ceroni (G.)** Roma nei suoi quartieri o nel suo suburbio. Roma, 1942.
- Chierici (G.)** La Chiesa di S. Satiro a Milano e alcune considerazioni sull'architettura preromanica in Lombardia. (Centro Naz. di Studi di Architettura. Gruppo Lombardo 1). Milano, 1942.
- La pusteria di S. Ambrogio a Milano. Il restauro, Milano, 1940.
- Chiavarello (R.)** La Chiesetta del Podio sui colli di Torino, 1940.
- Cinti (P.)** Il Beato Angelico. Firenze, 1940.
- Colacicchi (G.)** Antonio del Pollaiuolo. Firenze, 1943.
- Coletti (L.)** Paolo Veronese e la pittura a Verona nel suo tempo. Pisa, 1940.
- I primitivi. Vol. I: dall'Arte benedettina a Giotto. Novara, 1941.
- Tintoretto, Bergamo, 1940.
- Colombo (B. M.)** Il monumentale santuario di Maria SS. ma de la Soledad presso la chiesa di S. Demetrio in Palermo, Palermo, 1942.
- Conca Betti.** Michelangelo "omo da bene". Milano, 1940.
- Cortese (P.)** La Basilica del Santo. Padova, 1940.
- Costantini (V.)** Scultura e pittura italiana contemporanea. Milano, 1940.
- Cugini (D.)** L'Architetto Andrea d'Albino e i suoi monumenti in Padova. Bergamo, 1941.
- Dall'Oca Bianca agli Amici.** Pasqua 1940, Verona, 1940.
- Damiani (L.)** Biblioteca e Pinacoteca comunale, dal nome del donatore, Foresiana. Catalogo della Pinacoteca; opere d'arte, incisioni, mss. autografi.



- Municipio di Portoferraio. (Isola d'Elba). Portoferraio, 1940.
- Daverio (A.)** La Cupola di S. Gaudenzio, Novara, 1940.
- De Agostini (G.)** Italia viva. Atlante artistico di XXI quadri a colori, Milano, 1941.
- De Angeli d'Ossat (G.)** Le Influenze bizantine nell'architettura romanica, Roma, 1942.
- De Capitani d'Arzago (A.)** Antichi tessuti della Basilica Ambrosiana, Milano, 1941.
- De Carli (G.)** La Cattedrale di Trento, Trento, 1941.
- De Chirico (G.)** Achille Funi pittore, Milano, 1940.
- Piero Della Francesca.** De prospettiva pingendi. A cura di G. Nicco Fasola, Firenze, 1942.
- Delogu (G.)** Michelangelo, Bergamo, 1940.
- De Micheli (M.)** Manzu, 24 disegni, Milano, 1942.
- Desideri Costa (L.)** La Chiesa di S. Martino del Vescovo, l'Oratorio dei Buonomini e gli Affreschi sulle opere di misericordia in Firenze presso le case degli Alighieri, s.n.t. (1942).
- De Witt (A.)** Incisione italiana, Milano, 1941.
- Di Equila (G.)** Vito d'Anna (1719-1769). La vita e l'arte, Firenze, 1940.
- Dipinti di Maestri dell'800.** Gruppo di opere pittoriche antiche. (Galleria Guglielmi, Milano. Catalogo Raccolta Bob. A. Ambrosi), Milano, 1940.
- Di Stefani (G.)** Pietro Novelli, Il Monreale, Palermo, 1940.
- Ederle (G.)** Cenni sulla chiesa di S. Giovanni in Foro, Verona, 1940.
- Ercoli (E.)** Il tappeto orientale nella storia, nell'arte, nel commercio con un breve studio sui tappeti rustici italiani, Roma, 1942.
- Faberini (P.)** Benvenuto da Livorno, Livorno, 1941.
- Nicco Fasola (G.)** Nicola Pisano. Orientamenti sulla formazione del gusto italiano, Roma, 1941.
- Fasolo (F. e G.)** Il nuovo "Curiosum" di Roma. Disegni originali, Roma, 1943.
- Fedele (P.)** Il culto di Roma nel M. E. e la casa di Niccola di Crescenzo, Roma, Centrol di Studi di Storia dell'Architettura, 1940.
- Felletti (Maj. B. M.)** La Casa e l'arredamento. (Civiltà romana 15. Mostra della Romanità), Roma, 1940.
- Ferrari (V.)** Tessuti decorativi, Galloni, nastri, bordura, fiocchi dei secoli XVI-XIX. Contributo alla storia dell'arte tessile in Italia. Note di Morazzoni. (Tessuti decorativi del Museo V. Ferrari, Milano, Arte Minore, II), Milano, 1942.
- Filangeri (R. A.)** Relazione sull'isolamento a sui restauri di Castel Nuovo, Napoli, 1940.
- Filippini (F.)** Gli affreschi di Monte da Bologna nel Duomo di Trento, Bologna, 1940.
- Fiocco (G.)** La Pittura toscana del Quattrocento, Novara, 1941.
- Pitture del Settecento italiano in Portogallo. Fasc. x, Roma, 1940.
- Vittore Carpaccio, Milano, 1942.
- Fossati (L.)** La Chiocchia con pulcini del tesoro basilicale monzese, Monza, 1940.
- Franchi (R.)** Enrico Bordini pittore, Firenze, 1942.
- Giovanni Colacicchi, Firenze, 1941.
- Furlotti (B.)** Della creazione pittorica dell'opera d'arte, Modena, 1941.
- Galleria d'Arte "Firenze."** Raccolta d'arte. Artisti italiani dell'800, Collezione completa delle acquedotti di G. Fattori. Con pref. di A. Cecconi, Firenze, 1941.
- Galleria D'Arte "Firenze."** Raccolta d'arte. Artisti italiani dell'800, Con pref. di V. D'Aste, Firenze, 1942.
- Galleria Duomo.** Milano. Mostra postuma di Filiberto Minozzi, pittore vagabondo (1877-1936), Milano, 1942.
- Galleria Lombardi.** Torino. Francesco Malaurea 1812-1886. Mostra postuma 15/28 febbraio 1942, Torino, 1942.
- Galli (R.)** Lavinia Fontana pittrice 1552-1614, Imola, 1940.
- Galli (E.), Vicci (G.)** Il restauro del ponte romano di Porta Cappuccini in Ascoli Piceno, Urbino, 1940.
- Gallo (R.)** L'Incisione nel settecento a Venezia e a Bassano, Venezia, 1941.
- Galvano (A.)** Felice Casorati pittore, Milano, 1940.
- Gambirasio (G.)** Lapidari seriatesi, Bergamo, 1941.
- Gauguin (P.)** Noa-Noa e altri scritte (1891-1903) a cura di D. Morosini, Milano, 1941.
- Geiger (B.)** Antonio Carneio, Udine, 1940.
- Gengaro (M. L.)** Orientamenti della critica d'arte del Rinascimento cinquecentesco, Milano-Messina, 1941.
- Scultura, Milano, 1941.
- Umanesimo e Rinascimento, Torino, 1940.
- Giampaoli (C.)** Dizionario storico della vita e opere degli architetti, pittori e scultori italiani. I: Architetti, Napoli, 1942.
- Gianferrari (E.)** Disciplina del mercato dell'arte moderna. Relazione presentata al III Concorso Naz. dei Mercati d'Arte, Milano, 1940.
- Giani (G.)** Pittori italiani contemporanei, Milano, 1942.
- Giannoni (O.)** Giunte sulle vite dei pittori napoletani. A cura di Ottavio Morisani, Napoli, 1941.
- Giavarini (F. A.)** L'architetto Raffaele Cattaneo, Rovigo, 1941.
- Gibellino Krasceninnicowa (M.)** Guglielmo della Porta scultore del Papa Paolo III Farnese, Roma, 1944.
- Giglioli (O. H.)** Mostra degli incisori toscani del seicento, Firenze, 1942.
- Ginori Conti (P.)** La Basilica di S. Lorenzo di Firenze e la famiglia Ginori, Firenze, 1940.
- Un antifonario miniato della scuola bolognese, Firenze, 1940.
- Giovanardi (G.)** Il Santuario della Madonna delle Grazie nel Colle Covignano, Parma, 1940.
- Giorelli (G.)** La Cappella Sistina. Parte prima: La Volta, Brescia, 1941.
- Giovannoni (G.)** L'architettura come volontà costruttiva del genio romano e italico, Roma, 1939.
- Iconographia dell'Ottocento Italiano.** 104 Tavole, Milano, 1942.
- Lamboglia (N.)** Vado Romana. (Itinerari Storico-Turistici della Riviera da Ponente), Bordighera, 1940.
- Lavagnino (E.)** Gli artistici italiani in Portogallo, Roma, 1940.
- Locatelli Milesi (S.)** Bergamo vecchia e nuova. Itinerari, incontri, ricordi, Bergamo, 1941.
- Lodovici (S.)** Storici, teorici e critici delle arti figurative (1800-1940) (Enciclopedia biogr. e bibliogr. Italiana, Serie IV), Roma, 1942.
- Longhi (R.)** Carlo Braccresco. (Ist. Naz. di Studi del Rinascimento. Sezione Lombarda), Milano, 1942.
- Lorenzetti (G.)** Torcello, la sua storia, i suoi monumenti, Venezia, 1940.
- Luzio (A.), Paribeni (R.)** Il Trionfo di Cesare di Andrea Mantegna, Roma, 1940.
- Maestri della Natura Morta.** ("I Grandi Maestri del Colore"), Bergamo, 1940.
- Marchi (M.)** Michelangelo Grigoletti, Venezia, 1941.
- Madesani (A.)** L'Abbazia di S. Sigismondo, Cremona, 1942.
- Mariani (V.)** Michelangelo. (I Grandi Italiani, Collana di biografie dir. da L. Federzoni), Torino, 1942.
- Poesia di Michelangelo, Roma, 1941.
- Marinetti (F. T.)** A. G. Ambrosi aeropittore futurista nelle opere della raccolta Caproni, Verona, 1941.



- Renato di Bosio, aeroscultore aeropittore e aerostilografo futurista. Verona, 1941.
- Marini (E.)** Foresiana, biblioteca e pinacoteca del Municipio di Portoferraio. Catalogo schematico delle opere d'arte e degli oggetti notevoli. Portoferraio, 1940.
- La scuola di Tolmezzo. Padova, 1942.
- Marussig (P.)** 12 opere di Piero Marussig con scritti di R. Carrieri. (Pittori italiani contemporanei). Milano, 1942.
- Masciotta (M. A.)** Disegni di Kokoschka. Firenze, 1942.
- Ottone Rosai. Firenze, 1940.
- Maselli (G.)** La Chiese dei Serviti: S. Marcello al Corso, Sette Santi Fondatori, Sant'Eusebio. Arte. Storia. Documenti. Curiosità. Aneddoti. (Passeggiate per le chiese romane). Roma, 1941.
- Mauroner (F.)** Le Incisioni di Tiziano. Venezia, 1941.
- Mazzini (F.)** Tappeti orientali. Livorno, 1940.
- Leonardo Sormano, Savona, 1941.
- Michelangelo Buonarroti nel IV Centenario del "Giudizio Universale." Firenze, 1942.
- Ministero dell'Educazione Nazionale. Direzione Generale delle Arti. La protezione del patrimonio artistico nazionale dalle offese della guerra aerea. Firenze, 1942.
- Miscellanea Gregoriana. Raccoltà di scritti pubbl. nel I Centenario della fondazione del Museo Egiziano 1830-1939. Città del Vaticano, 1941.
- Modigliani (E.)** La Collezione di Luigi Albertini. 36 tavole. Roma, 1942.
- Molajoli (B.)** La Basilica Eufraiana di Parenzo. Parenzo, 1940.
- Molajoli, Ortolani, de Filippis.** L'Arte italiana e le terre d'oltremare dal '400 all'800. Milano, 1940.
- Monticciolo (S.)** La Chiesa di Maria SS. ma della Grazia di Alcamo. Alcamo, 1942.
- Morandotti (A.)** Mostra del paesaggio veneziano del settecento. Catalogo. Roma, 1940.
- Mostra di pittura veneziana del settecento. Catalogo. Roma, 1941.
- Morassi (A.)** Giorgione. (Coll. "Valori Plastici"). Milano, 1942.
- La R. Pinacoteca di Brera. 3a ed. Roma, 1942.
- Morazzoni (G.)** Il mobilio italiano. Firenze, 1940.
- Mostra delle antiche stoffe. Genesi dal secolo XV al sec. XIX. Teatro Carlo Felice, Aprile-Luglio 1941. Genova, 1941.
- Le placchette italiane, sec. XV-XIX. Contributi alla conoscenza della placchetta italiana a cura di E. Imbert. Milano, 1941.
- Morelli (A.)** Anatomia per gli artisti, Faenza, 1940.
- Morisani (O.)** Saggi sulla scultura napoletana del Cinquecento, Napoli, 1941.
- Mostra d'Arte Retrospettiva alla Triennale d'Oltremare. Catalogo, Napoli, 1941.
- Mostra del 8500 Toscano in Palazzo Strozzi, Aprile-Ottobre 1940. Pref. di G. Poggi, Firenze, 1940.
- Mostra di Disegni contemporanei, Catalogo illustrato. R. Pinacoteca di Brera. Milano, 1941.
- Munoz (A.)** Rembrandt van Rijn. Roma, 1941.
- Anton Van Dyck. Roma, 1941.
- La Basilica di S. Lorenzo fuori le Mura. Roma, 1944.
- Figure romane. Roma, 1944.
- L'Isolamento del Colle Capitolino. Roma, 1943.
- Roma cent'anni fa. Roma, 1939.
- Nicodemì (G.)** Beppe Ciardi. Milano, 1942.
- Catalogo delle raccolte numismatiche del Castello Sforzesco. Milano, 1938-1940.
- I dipinti di Mose Bianchi posseduti dal Comune di Milano. Catalogo. Milano, Aprile-Maggio 1942. Milano, 1942.
- Notarnicola (G.)** I trulli di Alberobello dalla preistorica al presente. Roma, 1940.
- Ozzola (L.)** Il vestiario italiano dal 1500 al 1550. Saggio di cronologia documentale. Roma, 1940.
- Pacca (B.)** Da Montecavallo alle Tuileries. Roma, 1941.
- Pacchioni (G.)** Presentazione dei disegni di G. Grazioli. (Mostra della Galleria del Milione). Milano, 1940.
- Pallucchini (R.)** Gli affreschi di Paolo Veronese a Moser. Bergamo, 1943.
- G. B. Piazzetta, Roma, 1942.
- G. B. Tiepolo, Roma, 1942.
- Veronese. Bergamo, 1940.
- Panazza (G.)** L'arte medioevale nel territorio bresciano. (Ateneo di Brescia). Bergamo, 1942.
- Papini (G.)** Medardo Rosso, Milano, 1940.
- Paredi (A.)** Sant'Ambrogio e la sua età. (Collezione Hoepli). Milano, 1941.
- Parronchi (A.)** Ottone Rosai. Milano, 1941.
- Pecchiai (P.)** Acquadotti e fontane di Roma nel Cinquecento. Roma, 1944.
- La scalinata di Piazza di Spagna e Villa Medici. Roma, 1941.
- Petrignani (A.)** Il Santuario della Scala Santa nelle sue successive trasformazioni dalla sua origine ai recenti lavori. Roma, 1941.
- Petrucchi (A.)** L'Incisione italiana. Roma, 1943.
- Petrzellis (N.)** Filosofia dell'arte, Roma, 1944.
- Pfister (F.)** Enrico Prampolini. Milano, 1940.
- Piacentini (M.)** Il Palazzo di Giustizia di Milano, Intr. di R. Calzini, Milano, 1942.
- Pica (A. D.)** Architettura moderna in Italia. Milano, 1940.
- Piccone Stella (A.)** Introduzione a Roma. Milano, 1943.
- Pitture (Le)** Napoletane dell'800 della "Raccolta Casciaro" e altre opere esposte nella Galleria d'Arte 16 Maggio-10 Giugno, 1942. Prefazione di Carlo Hausman. Firenze, 1942.
- Pivoene (G.)** La raccolta Feroldi. (Le grandi raccolte d'arte contemporanea). Milano, 1942.
- Piperata (C.)** Giuseppe Bernardino Bison 1762-1844. Padova, 1940.
- Pittore di Selvaggini. Bergamo, 1940.
- Prampolini (E.)** Scenotecnica. Milano, 1940.
- Praz (M.)** Gusto neoclassico. Firenze, 1940.
- Primio (III)** Bergamo. Mostra Naz. di pittura Anno 1940. Palazzo della Ragione, Bergamo. Bergamo, 1940.
- Quartieri (M.)** Duomo di Modena. Modena, 1942.
- Raimondi (G.)** Disegni di Carlo Carra. (Arte Mod. Ital. a cura di G. Scheiwiller). Milano, 1942.
- Romano (P.)** Ponte. 1 (Proia A., Roma nel Cinquecento 11). Roma, 1941.
- Strade e piazze di Roma, Roma, 1940.
- Rosai (S.)** L'assunzione di Maria nella storia dell'arte cristiana. Napoli, 1940.
- Rotondi (P.)** Introduzione alla storia dell'arte italiana. Milano, 1942.
- Sculture e bozzetti lauretani. Contributi alla scultura del Cinquecento. Urbino, 1941.
- Studie ricerche intorno a Lorenzo Salimbeni e Jacopo da Sanseverino, Pietro da Montepulciano a Giacomo da Recanati. Fabriano, 1940.
- Saggi e Lezioni sull'Arte Sacra. Roma, 1940.
- Salmi (M.)** Piero della Francesca. Gli affreschi di S. Francesco in Arezzo. Bergamo, 1940.
- Santagostino Sandri (M.)** La legatura d'arte. Legni originali di Italo Setti. Milano, 1940.
- Sartorio (A.)** Gli elementi dell'architettura funzionale. Sintesi panoramica dell'architettura moderna. Milano, 1941.
- Savini (R.)** Botticelli (Capolavori della pittura). Novara, 1942.
- Giotto. Novara, 1941.
- Savinio (A.)** Leo Longanesi, Milano, 1941.



# BIBLIOGRAPHIES OF BOOKS PUBLISHED SINCE THE OUTBREAK OF THE WAR 219

- Scheiwiller (G.)** Carbo Barbieri, Milano, 1941.  
 — Henri Matisse, III. ed. (Arte Moderna Straniera, n.3). Milano, 1942.  
 — Pompeo Borra. (Pittori e scultori italiani contemporanei. Monografie a cura di Giampietro Giani 1). Milano, 1941.
- Schiavo (A.)** La Donna nelle sculture del Bernini, Milano, 1942.  
 — Monumenti di Pienza, Milano, 1942.  
 — Villa Doria-Pamphili, Milano, 1942.
- Schuster (I.)** Sant'Ambrogio e le più antiche basiliche milanesi. Milano, 1940.
- Sciltian.** Cinque inganni. Pref. di Gio Ponti. Milano, 1942.
- Scipione** Cinque tricromie. Pref. di A. Santangelo. Milano, 1941.
- Segnati (P.)** L'Opera del Vantivelli a Brescia. Carteggio inedito tra gli architetti Luigi Vantivelli e l'Abate Antonio Marchetti. Brescia, 1938.
- Serra (L.)** Raffaello. Torino, 1941.
- Severini (G.)** Orfeo Tamburi (Artisti d'oggi, 1). Roma, 1941.
- Servolini (L.)** Problemi e aspetti dell'incisione. Forlì, 1940.
- Sgadari di lo Monaco** Pittori e scultori siciliani. Dal Seicento al primo Ottocento. Palermo, 1940.
- Signorini (T.)** Riomaggiore, con 163 disegni inediti. Firenze, 1942.
- Silvestrelli (G.)** Città, castelli e torre della Regione Romana. 2a. Ed. Roma, Ist. di Studi Romani, 1940.
- Siniscalchi (L.)** Antonio Donghi. (Arte Moderna Italiana, n. 42. Serie A-Pittori, n.36). Milano, 1943.
- Soffici (A.)** Ricordi di vita artistica e letteraria. II Ed. accresciuta. Firenze, 1942.
- Somare' (E.)** Guglielmo Micheli. Milano, 1940.
- Spadafora (G.)** Icona ginevrina nel Duomo di Marsala. Con introduzione di Filippo di Pietro. Palermo, 1942.
- Spallici (A.)** Alfeo Bedeschi. Milano, 1940.
- Spano (M.)** Iniziazione alle belle arti. Milano-Messina, 1942.
- Spezi (P.)** Le Chiese di Roma nei xx secoli del Cristianesimo (Bibl. Stor. di fonti e documenti 3). Roma, 1940.
- Stohlman (F.)** Gli smalti del Museo Sacro Vaticano. (Catalogo del Museo Sacro, Vol. 2). Città del Vaticano, 1939.
- Tancredi (G.)** La Tomba di Rotari in Monte Sant'Angelo. Studi critici, Manfredonia, 1941.
- Tarchi (U.)** L'Arte medioevale nell'Umbria e nella Sabina. Vol. IV: Periodo medioevale. Architettura religiosa dalla metà del sec. XIII ai principi del sec. XV. Milano, 1940.
- Testori (G.)** Henri Matisse, Milano, 1943.
- Titta Rosa (G.)** Roberto Alois. Milano, 1940.
- Tomei (P.)** L'Architettura a Roma nel Cinquecento. Roma, 1942.
- Torcello.** Mario Brunetti, Sergio Battini, Ferdinando Forlati, Giuseppe Fiocco. Venezia, 1940.
- Tormo (E.)** Monumentos de espanolos en Roma y de portugueses e hispano-americanos. Vol. I. Roma, 1940.
- Torriano (P.)** Carlo Carra (Monografie d'arte di "Stile" a cura di V. G. Barbaroux e Gio Ponti) Milano, 1942.  
 — Primo Conti. Firenze, 1941.
- Tre Maestri dell'Ottocento.** Boldini, De Nittis, Fattori, Milano, 1941.
- Trecca (G.)** Paolo Veronese e Verona. Verona, 1940.
- Un Secolo di progresso scientifico italiano: 1839-1939.** Roma, 1940.
- Valente (C.)** Il Tempio di S. Francesco restaurato e restituito all'antica bellezza, Roma, 1942.
- Valente (G.)** Esperienze di una nuova teoria sul chiaro-scuro. Napoli, 1940.
- Varagnolo (D.)** Alessandro Milesi. Venezia, 1942.
- Venturi (A.)** Leonardo e la sua scuola. Novara, 1941.  
 — Storia dell'Arte Italiana. Vol. IX, parte III, Milano, 1940.  
 — Storia dell'Arte Italiana. Vol. XXV. Milano, 1941.
- Viani (L.)** Disegni a cura di A. del Massa. (Arte Moderna Italiana), Milano, 1942.
- Vigni (G.)** Disegni del Tiepolo, Padova, 1942.
- Visentini (G.)** Bartolini. Rovereto, 1943.
- Wittgens (F.)** Mentore. Milano, 1940.
- Zampino (M.)** Giuliano da Maiano. Napoli, 1940.  
 — Portali di palazzi napoletani. Napoli, 1940.
- Zampetti (P.)** Il Portale del Duomo di Ancona, Ancona, 1940.
- Zanoni (F.)** Il Duomo di Cremona. Cremona, 1941.
- Zanzi (E.)** Centocinquante opere di Antonio Mancini. Mostra commemorativa sotto gli auspici della R. Accademia d'Italia nel decennale della morte. Torino, 1940.
- Zocca (M.)** Architettura minore in Italia. III—Lazio e suburbio di Roma. Roma, 1940.
- Zorzi (E.)** Venezia (Storia e Civiltà. Collana diretta da Carlo Morandi). Varese-Milano, 1942.

## GERMANY

- Altdeutsche (Die) Malerei.** Jena, 1941.
- Altheim (F.)** Italien und Röm. Bildteil von E. Trautmann-Nehring. Bd. 1: Die Grundlagen. Amsterdam-Leipzig, 1941.
- Adriani (G.)** Anton van Dyck, Italienisches Skizzenbuch. Wien, 1940.
- Altonowitsch (D.)** Deutsche Einflüsse auf die Ukrainische Kunst. Leipzig, 1942.
- Baur (A.)** Cuno Amiet. Basel, 1943.
- Bereem (E. von der)** Die Gemälde des Jacopo Tintoretto. München, 1942.
- Blauen (Die) Bücher:**  
 1. Deutsches Land in 111 Flugaufnahmen. Leipzig, 1940.  
 2. Bürgerbauten aus 4 Jahr. deutscher Vergangenheit. Lpz., 1941.  
 3. Die schöne Heimat, Leipzig, 1941.  
 4. Zillich (H.) Siebenbürgen und seine Wehrbauten. Taunus u. Leipzig, 1941?  
 5. Richter (L.) Die gute Einkehr. Auswahl schönster Holzschnitte, Taunus u. Leipzig, 1942.
6. Richter (E.) Der Feierabend. Taunus u. Leipzig, 1941.
7. Sauerlands (M.) Michelangelo. 2. Aufl. Taunus u. Leipzig, 1941.
- Blenken (H.)** Hubert and Jan van Eyck. München, 1941.
- Brauch und Sinnbild.** Eugen Fehle zum 60. Geburtstag gewidmet v.s. Schülern und Freunden. Hrsg. v. Ferdinand Hersman u. Wolfgang Treutlein. Karlsruhe, 1940.
- Brinckmann (A. E.)** Die Kunst des Rokoko. Berlin, 1940.
- Bruhns (L.)** Das Brueghel Buch. Wien, 1941.
- Buerkel (L.)** Heinrich Buerkel. München, 1940.
- Burckhardt (J.)** J. Burckhardt u. die Karlsruhe Galerie, Briefe u. Gutachten. Karlsruhe, 1941. (Schriften d. St. Kunsthalle Karlsruhe).  
 — Die Kultur der Renaissance in Italien. Berlin, 1941.  
 — Die Landschaften von Peter Paul Rubens. Wien, 1940.
- Buttler, Werner.** Der donauländische und der west-



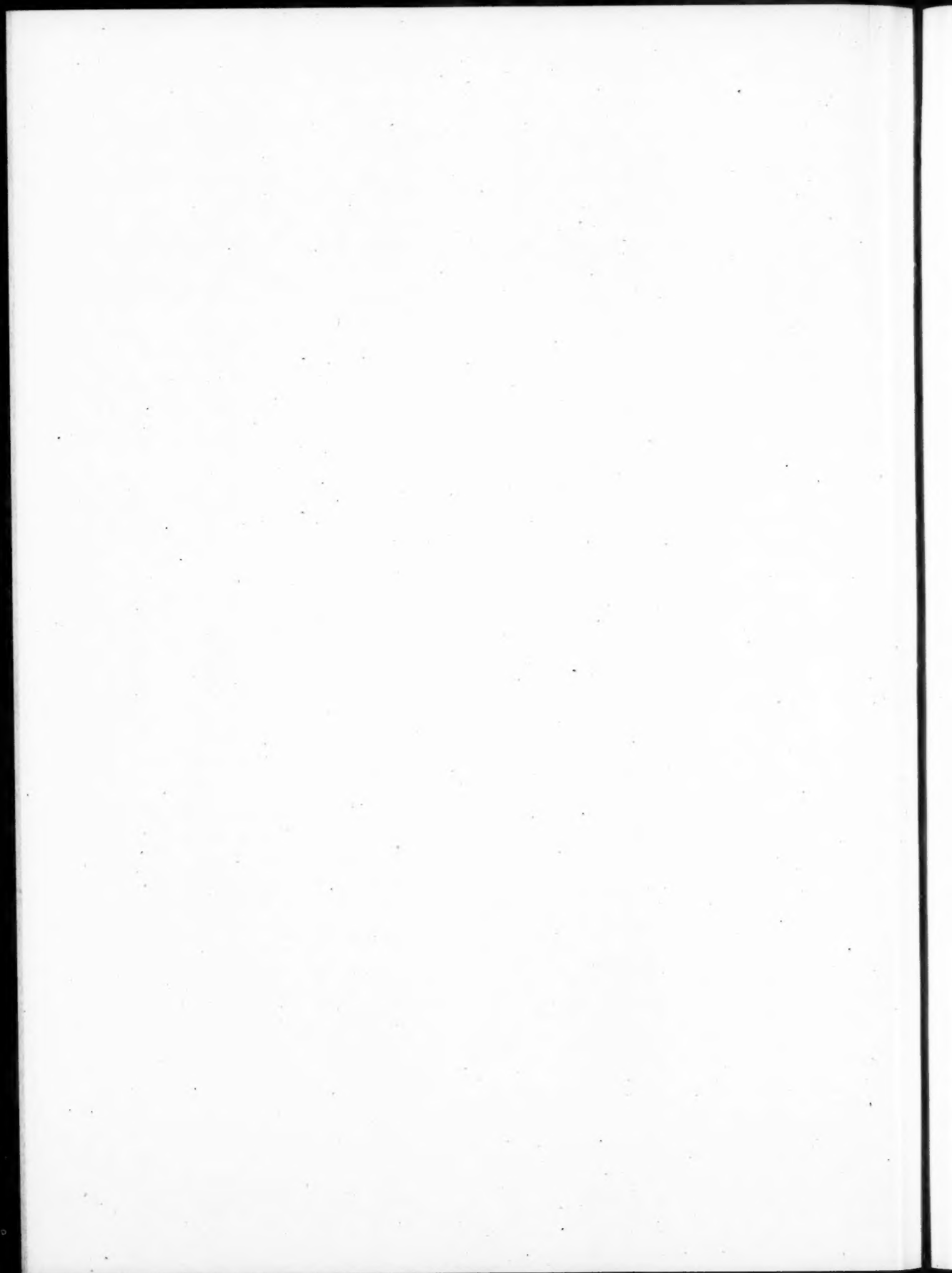
- liche Kulturkreis der jüngeren Steinzeit. Berlin, de Gruyter, 1938.
- Christoffel (N.)** Klassizismus in Frankreich um 1800. München, 1941.
- Meisterwerke der Französischen Kunst. Leipzig, 1939.
- Poussin und Claude Lorrain. München, 1942.
- Clemms (R.)** Bühnenbilder. Leipzig, 1941.
- Deusch (W.)** Die Aktzeichnung in der Europäischen Kunst 1400–1900. Berlin, 1943.
- Deutsche (Das)** Ledermuseum. Zum 25 jährigen Jubiläum im Kriegsjahr 1942. Offenbach, 1942. (Offenbacher Monatsrundschaу Sonderheft).
- Deutschland-Italien.** Festschrift für Wilhelm Waetzoldt zu s. 60. Geburtstag. Berlin, 1941.
- Drost (W.)** Das jüngste Gericht des Hans Memling in der Marienkirche zu Danzig. Wien, 1941.
- Dürer (A.)** Bildnisse. Berlin, 1940. (Die Silbernen Bücher).
- Dussker (L.)** Sebastiano del Piombo. Basel, 1942.
- Esser (K. H.)** Der Architektur-Raum als Erlebnisraum. Bonn, 1940.
- Fettich (N.)** Die altungarische Kunst. Berlin, 1942 (Schr. z. Kunstgesch. Südosteuropas 1) (Kupferberg).
- Feulner (A.)** Karl Berthold. Leipzig, 1941.
- Fiedler (K.)** Vom Wesen der Kunst. München, 1942.
- Fischer (J.)** Deutsches Mosaik und seine geschichtlichen Quellen. Leipzig, 1939.
- Fischer (O.)** Geschichte der deutschen Malerei. München, 1942. (Bruckmanns Deutsche Kunstgeschichte, B. III).
- Goering (N.)** Deutsche Malerei des siebzehnten und achtzehnten Jahrhunderts. Berlin, 1940.
- Gräber (H.)** Edgar Degas. Basel, 1940.
- Edouard Manet. Basel, 1941.
- Paul Cézanne. Basel, 1942.
- Vincent Van Gogh. Basel, 1941.
- Gradmann (E.)** Bildhauer-Zeichnungen. Basel, 1943.
- Greifenhagen (A.)** Braunschweig. Herzog Anton Ulrich-Museum. München, 1940. CFA. (Deutschland, Bd. 4.).
- Grimm (H.)** Raffael. Berlin, 1941.
- Grimshitz (B.)** Maler der Ostmark im 19. Jahrh. Wien, 1940.
- Hagar (W.)** Die Bauten des deutschen Barocks. Leipzig, 1942.
- Hegemann (H.)** Giovanni Battista Tiepolo. Berlin, 1940.
- Hoffmann (H.)** Farbige Raumkunst. VII, Folge. Stuttgart, 1942.
- Humboldt (W. von)** Briefe an Christian Gottfried Körner. Berlin, 1940.
- Italianische Madonnen des Quattrocento.** Berlin, 1942. (Die Silbernen Bücher).
- Jacques (R.)** Deutsche Textilkunst. Berlin, 1942.
- Jannasch (A.)** Die Niederländischen Maler des 17. Jahrhunderts. Berlin, 1940.
- Karl Blechen.** Berlin, 1940 (Denkmäler Deutscher Kunst).
- Kauffmann, F. A.** Roms ewiges Antlitz. Berlin, 1940.
- Kehrer (H.)** Greco als Gestalt des Manierismus. München, 1939.
- Kern-Schrering (P.)** Die Kunst der Marmor-Intarsia. Berlin, 1940.
- Kersting (G. F.)** Bilder und Zeichnungen. Berlin, 1939.
- Kletze (O.)** Peter Parler. Leipzig, 1940.
- Kolbe (G.)** Zeichnungen. Hrsg. W. Pinder. Berlin, 1942.
- Kriegbaum (F.)** Michelangelo. Die Bildwerke. Berlin, 1940.
- Kummel (O.)** Meisterwerke Japanischer Landschaftskunst. Berlin, 1939.
- Kurt (W.)** Berliner Zeichner. Berlin, 1941.
- Lilienfein (H.)** Lukas Cranach. Leipzig, 1942.
- Limfert (O.)** Alt Kölner Meister. München, 1941.
- Lutterotti (O.)** Joseph Anton Koch. Berlin, 1940.
- Michelangelo.** Weltgericht mit einer Lebensbeschreibung von A. Condivi. Wien, 1942.
- Misar (H.)** Freskobilddnisse der Frührenaissance. Wien, 1941.
- Moulet (P. M.)** Les mattres à l'oeillet. Basel, 1943.
- Nebbia (U.)** Michelangelo. Leipzig, 1940.
- Nemitz (F.)** Die Kunst Russlands. Berlin, 1940.
- Oettinger (K.)** Altdeutsche Bildschnitzer der Ostmark. Wien, 1939.
- Altdeutsche Maler der Ostmark. Wien, 1942.
- Passe (H.)** Lucas Cranach. Wien, 1942.
- Pee (H.)** Die Palastbauten des Andrea Palladio. Würzburg, 1941.
- Pinder (W.)** Die Kunst der deutschen Kaiserzeit. Leipzig, 1943.
- Preetorius (E.)** Das Szenische Werk. Berlin, 1941–1943.
- Privat (K.)** Philipp Otto Runge. Berlin, 1942.
- Puyvelde (L. van)** Les esquisses de Rubens. Basel, 1940.
- Rasmussen (S. E.)** Nordische Baukunst. Berlin, 1940.
- Reinhardt (H.)** Das Basler Münster. Basel, 1939.
- Renz (R.)** Die Kunst der deutschen Romantik. München, 1939.
- Rittich (W.)** La nouvelle plastique allemande. Berlin, 1942.
- Rohde (A.)** Der junge Corinthus. Berlin, 1941.
- Ruhmer (E.)** Das Rein-Malerische. Halle (Saale), 1941. Diss.
- Rupp (F.)** Das Panorama in der Spätbarocken Kunst Süddeutschlands. Erlangen, 1940.
- Sammlung Schroll:**
1. **Baldass (L.)** Hans Memling. Wien, 1942.
  2. **Gerstenberg (K.)** Tilman Riemenschneider. Wien, 1941.
  3. **Keller (H.)** Giovanni Pisano. Wien, 1942.
  4. **Lauts (J.)** Antonello da Messina. Wien, 1940.
  5. ——— Ghirlandaio. Wien, 1943.
  6. **Novotny (Y.)** Adalbert Stifter als Maler. Wien, 1941.
  7. **Oertel (R.)** Fra Filippo Lippi. Wien, 1942.
  8. **Planiscig.** Andrea del Verrocchio. Wien, 1941.
  9. ——— Bernardo u. Antonio Rossellino. Wien, 1940.
  10. ——— Desiderio da Settignano. Wien, 1942.
  11. ——— Donatello. Wien, 1939.
  12. ——— Lorenzo Ghiberti. Wien, 1940.
  13. ——— Luca della Robbia. Wien, 1939.
  14. **Schudt (L.)** Carvaggio. Wien, 1942.
  15. **Swoboda (K.)** Peter Parler. Wien, 1940.
  16. **Waldmann (E.)** Der Maler Adolph Menzel. Wien, 1941.
- Scheffler (K. A.)** Form als Schicksal. Leipzig, 1939.
- Die grossen französischen Maler des 19. Jahrhunderts. München, 1942.
- Schlosser (J. von)** Leben u. Meinungen des Florentinischen Bildners Lorenzo Ghiberti. Basel, 1941.
- Schreyer (L.)** Bildnis des heiligen Geistes. Freiburg, 1940.
- Schuller (S.)** Die Geschichte der Christlichen Kunst in China. Berlin, 1940.
- Schultze-Battmann (E.)** Giuseppe Valadier, ein klassizistischer Architekt Roms 1762–1839. Dresden, 1939.
- Sedlmayr (H.)** Die Architektur Borrominis. München, 1939.
- Michelangelo. München, 1940.
- Waldmann (E.)** Albrecht Dürer. Leipzig, 1941.
- Das Bild des Kindes in der Malerei. Berlin, 1940.
- Winkler (J.)** Altdeutsche Tafelmalerei. München, 1941.



## CONTENTS

|   |     |
|---|-----|
| ANGEL, J. LAWRENCE. Neolithic Ancestors of the Greeks—Plate X                               | 252 |
| AVDIYEV, V. Achievements of Soviet Archaeology  | 221 |
| CARPENTER, RHYS. The Identity of the Ruler  | 353 |
| LEVI, DORO. Gleanings from Crete  | 270 |
| RICHTER, GISELA M. A. An Ivory Relief in the Metropolitan Museum of Art                     | 261 |
| STUART, MERIWETHER. The Denarius of M'. Aemilius Lepidus and the Aqua Marcia—Plates VIII-IX | 226 |
| WILLIAMS, PHYLLIS L. Amykos and the Dioskouroi  | 330 |
| Note on the Interpretation of the Ficoroni Cista  | 348 |
| Archaeological Notes  | 221 |
| The International Association for Classical Archaeology                                     | 396 |
| News and Discussions—Stephen Bleeker Luce   | 358 |
| Necrology   | 358 |
| General and Miscellaneous   | 361 |
| Egypt   | 363 |
| Mesopotamia   | 363 |
| Palestine   | 364 |
| Greece  | 364 |
| Rome  | 365 |
| Roman Gaul  | 368 |
| Roman Britain   | 368 |
| Early Christian and Byzantine   | 368 |
| Mediaeval   | 370 |
| Renaissance   | 373 |
| America   | 375 |
| Far East  | 377 |
| U.S.S.R.  | 377 |
| Book Reviews  | 378 |







## ARCHAEOLOGICAL NOTES

### ACHIEVEMENTS OF SOVIET ARCHAEOLOGY

RUSSIAN archaeologists have made a profound study of the distant past of their country, the names of Uvarov, Spitsyn, Zabelin and Gorodtsov having earned well deserved fame in this field. The numerous papers written by Gorodtsov have made a fine contribution to archaeology by providing a systematic study of prehistoric Russia from the Palaeolithic to the Iron Age. In the course of many years of field work Gorodtsov studied a large number of ancient camping grounds and settlements and discovered a tremendous quantity of archaeological material. Another service rendered by Gorodtsov was the foundation of the Department of Archaeology of the Moscow Museum of History. Finally, Gorodtsov may well be considered the patriarch of Russian archaeologists, as almost all Russian and Soviet workers in archaeology have been his pupils; about 50 of them now hold the degree of Professor.

The October revolution brought about a further development of archaeology by providing scientists working in all fields with possibilities for the free and full development of their work. With justifiable pride Soviet scientists may well sum up the achievements they have made since 1917. The most important of these were mentioned by Professor S. V. Kiselev in an article included in the Academy of Sciences symposium "Twenty-five Years of Historical Studies in the USSR," published in Moscow in 1942. At the beginning of June 1944 a number of papers on the achievements of Soviet archaeology were read at a session of the Department of History and Philosophy of the Academy of Sciences and at a plenary session of the Institute of Archaeology. These sessions aimed at summing up the results of twenty-five years work in the field of archaeology and the successes achieved. They also laid down the most urgent problems to be studied and which are now being well dealt with by our Soviet archaeologists.

A paper on the Tripolje culture was read by T. S. Passak, who has done so much work in this interesting field. Passak pointed out that the work of Soviet archaeologists had not been confined to a mere study of the museum material discovered, but was centered around a number of important archaeological works which enabled scholars to study the Tripolje culture much more profoundly and completely than before. The new excavations made in various parts of the Ukraine have greatly extended the known territory over which this culture spread. There is no doubt that it was a Tripolje settlement of the late metal age that was unearthed at the village of Usatovo, near Odessa, where painted pottery, the bones of domestic animals and a crouched burial were discovered. Interesting excavations were also made at Podolia, in the basin of the Dniester, where a settlement of the Tripolje epoch was found with valuable polychrome pottery decorated with a spiral ornament very similar in type to the polychrome pottery found at Cucuteni in Rumania. A typical Tripolje settlement was excavated on the Bug River where a large number of tools was discovered. They were made of bone, horn and stone, chief among them being a hoe. There were also many bronze ornaments in this settlement. More

221

THE ARCHAEOLOGICAL INSTITUTE  
OF AMERICA

BOSTON UNIVERSITY  
COLLEGE OF LIBERAL ART  
LIBRARY



recently the Uman district has been thoroughly investigated. In this district a number of Tripolje "squares" were found which contained many relics of the past, among them an extremely interesting model of a Tripolje dwelling. In the Kiev region, especially in the vicinity of the village of Khalepye, another Tripolje settlement was discovered which contained a huge number of valuable relics. These excavations enabled archaeologists to restore in its entirety a great clan settlement with two concentric circles of mud dwellings; to restore a typical Tripolje house and to establish the type of life led on the Tripolje "square," as indicated at an earlier date by Gorodtsov. These excavations not only gave evidence of the wider extent of territory over which this agrarian civilization with a clan organization of society existed but they also established the period of its development and the historical and cultural links which connect it with similar settlements in the Danube basin and the eastern Mediterranean. These excavations and the study of the Tripolje culture made it possible for Soviet scholars to demolish the race migration theories of the Nazi falsifiers of history who tried to explain the origin of the agricultural settlements of the Tripolje type in the Dnieper and Dniester basins by the arrival of Indo-Germanic peoples in these regions in Neolithic times. At the present moment Soviet archaeologists, on the basis of irrefutable data, maintain that the Tripolje culture arose independently and that the Tripolje tribes were the most developed and civilized inhabitants of the whole of Eastern Europe.

A comprehensive paper by Professor Kiselev was devoted to the study of the Bronze Age. He pointed out that today this epoch is studied over a much larger geographical area than was formerly known. The Bronze Age, for example, was studied for the first time in the valleys of the Oka, the Kama and the Volga. A peculiar kind of camping ground and mound burial was found which was connected with forms typical of the Bronze Age in Siberia where a number of the most interesting relics of this period have been unearthed. Archaeologists S. A. Teploukhov, G. P. Sosnovsky and S. V. Kiselev showed that the Bronze Age in Siberia may be divided into three consecutive periods—Afnasiev, Andronov and Karasuk. These three stages are characterized by:

- 1) The introduction of animal husbandry and metallurgy;
- 2) The introduction of settled agriculture and the extension of intertribal contacts establishing cultural unity between Siberia and the Urals. No less interesting were the finds made in the Transcaucasus by B. S. Kuftin and in Central Asia by S. P. Tolstov and A. N. Bernstamm. Last of all, other important Bronze Age finds were made around the White Sea and in Karelia where archaic forms of Neolithic culture were retained for a long time.

In summing up the results of the study of the Bronze Age culture in the USSR, Professor Kiselev pointed out that this work had enabled savants to establish the processes which led to the formation of a tribal aristocracy, a fact which found its outward expression in the rich burials of the aristocrats, in the intricate burial ceremonies and in their grandiose buildings. Finally, this important archaeological work has established the unity of the cultural development of various ethnic groups living in the territory of the USSR during the Bronze Age and who incorporated in



their own cultures the achievements of the most progressive civilizations of the Near and the Far East.

A paper by B. A. Rybakov on the archaeological sources of Russian history was of great interest to historians. The very subject of the paper shows the level reached by archaeology in the USSR, where the science is closely related to the study of early history and has widely adopted the historical method of studying monuments of ancient civilizations. This has given the historian a tremendous amount of new archaeological material from which he has been able to draw a number of exceedingly important historical conclusions. Depending to a considerable extent on archaeological materials, Soviet historians may now study the problem of the origin of the Slavs much more profoundly than before, as well as the question of the interrelations between the Gothic and Slav cultures. Archaeological investigations have provided more accurate boundaries to the territories inhabited by the Slav tribes, especially the Vyatichi, Krivichi and Polyane tribes. The excavation of their settlements and mounds has provided material for an incisive study of village life and customs of the period, the methods of farming, handicrafts, social inequalities, and pagan faith. Extensive archaeological excavations in old Russian cities (V. A. Gorodtsov in Old Ryazan and A. V. Artsikhovskiy in Novgorod) produced excellent material for the study of old Russian town life. New archaeological material has thrown much light on the relations between Kiev Rus and other nations and countries, especially with Western Europe, the Bulgars of the Volga (A. P. Smirnov) and with the Khazars. Archaeologists have also brought to light interesting material for the study of warfare in old Russia and for the study of the weapons and tactics of the old Russian troops.

It is only in recent years that large scale archaeological work has been begun in Central Asia, but the results are already very important. Papers on this subject were read by A. N. Bernstamm and S. P. Tolstov. The latter reported on his work in the vicinity of ancient Khorasm, in the territory of the Kara-Kalpak Republic, on the territory covered by the ancient irrigation works in the Kzyl Kum desert and along the banks of the Amu Darya. These extensive archaeological investigations and excavations, carried out between 1937 and 1939, produced a large amount of material for the study of the history of Khorasm from the fourteenth century B.C. to the fifteenth century A.D. Whole towns, castles and forts with well preserved walls 60 feet high were brought to light. In some cases it has even been possible to establish the plan of the towns, as for example at Janbas Kala. The material discovered enables scholars to study the history of the district from the neolithic era to mediaeval times. A number of interesting discoveries enabled archaeologists to reconstruct the social and economic system and the political history of ancient and mediaeval Khorasm and also the historico-cultural bonds which linked Khorasm with neighboring countries. The Bronze Age remains found in the neighborhood of ancient Khorasm show connections with the Andronov culture which reveals the establishment of a single type of Eurasian steppe culture extending from the Minusink to the Volga and the Dnieper. Particularly interesting are the symbols on the rocks near Kara Tiuba in the Sultan Yuzdag Mountains. They represent boats, people, horsemen and geometric designs apparently connected with the burial



grounds of the ancient inhabitants of Khoresm; they are the more interesting in view of the fact that "towers of silence" existed at the same place at a later date. No less interesting are the finds made at the settlement Jambas Kala IV, where a large dwelling and a number of microliths were found. A fortress examined in great detail by S. P. Tolstov shows the development of the art of fortification at a very ancient period.

A. N. Bernstamm devoted his paper to the extensive excavations made in Kazakhstan between 1936 and 1938—in the Jambul and Alma Ata regions—and in the valleys of the River Chu and the Greater and Lesser Kebin in Kirghizia. Of particular interest were the excavations made at the ancient town of Taraz on the site of the present Jambul on the left bank of the River Talas. The discoveries here date back to a period between the fifth and fifteenth centuries A.D. The investigation of a huge territory in the region of the Seven Rivers brought to light Bronze Age relics which showed cultural influence from Southern Siberia (the Minusinsk culture) and from the West. Such discoveries as a sacrificial altar in the form of a recumbent ox give some idea of the culture of the pastoral peoples of the Seven Rivers. Of more recent date are the remains of the Hun invasion, the Avesta epoch, among which a vessel in the form of some mythological creature and an ossuary in the shape of a tent are worthy of special note; some relics from the Buddhist period, such as a statue of the Boddhisatva, and a number of articles from the period of the Timuridae.

A review of the archaeological and historical study of Central Asia during the past twenty-five years given by A. Y. Yakubovsky was complementary to the information contained in the papers read by A. N. Bernstamm and S. P. Tolstov. Yakubovsky spoke of the valuable results obtained from a study of the Mediaeval architecture of Samarkand, Merv, Bokhara, Shahrisabza, Urgench and other places and of the value of the extensive archaeological researches carried out in Central Asia.

The archaeological study of the ruins of ancient cities in the territory of the USSR was the subject of a paper by V. A. Blavatsky. This study was facilitated by the works of Soviet scholars among which some of the most important are Academician S. A. Zhebelev's study of the history of the Bosphorus, the work of A. V. Oreshnikov and A. N. Zograf in the sphere of ancient numismatics, the works of B. N. Grakov on ancient pottery inscriptions and problems of trade in ancient days, and Academician B. V. Farmakovsky's works on the history of ancient art.

Blavatsky spoke of the results obtained from the excavation of ancient Greek cities in the USSR. Foremost among these are the excavations at Olbia, carried out by Academician B. V. Farmakovsky, and the excavations at Panticapeum Phanagoria, Chersonese, Nympheya and other ancient cities. The study of the ruined cities and other ruins in their vicinity included the study of the necropolises of Chersonese and Kharaksa, the villa of Herakles, and the fishing and wine-making industries in the vicinity of Kamysh Burun; it was also possible to trace the history of the town of Phanagoria. All these archaeological works provided valuable material for the study of the life and customs of the ancient Greek cities in the south of the USSR.

A. P. Smirnov and T. Tretyakov read papers on the origin of the Slav tribes.



Smirnov dealt in detail with the origin of the Slav tribes in the Oka and Volga valleys. An archaeological study of this region shows that the formation of tribal alliances began in this region in the Bronze Age and that the tribes were culturally and ethnographically united. The unbroken course of the development of culture, incidentally, can be followed from the Neolithic period. Dwellings, pottery and tools continue to develop uninterruptedly from that time, which goes to prove that the Slav tribes of the Oka and the Volga have lived there from time immemorial and that their culture developed gradually and continuously.

The question of the origin of the Slav tribes living on the middle reaches of the Dnieper was dealt with in detail in a paper by Professor Tretyakov. The archaeological work carried out during recent years in the Ukraine, in particular along the rivers Vorskla, Desna, Irpen and Teterev, produced valuable information on this subject. One may now say with confidence that the Slav tribes on the left bank of the Dnieper were distinct from those of the right bank. The Desna and Seim area is apparently that district in which the Slavs are autochthonous. The Slavs to the east of the Dnieper followed a more primitive way of life. Hunting and farming in forest clearings were still followed up to the ninth century A.D. In the tenth and eleventh centuries there was a big movement of the Slavs to the Southeast which ended with the settlement of the Don Valley: this is to be explained by a desire to occupy the fertile Black Earth regions. In the Eastern Roman Empire this was accompanied by the appearance of the Rus tribes who, according to many historical sources (Jordan and others), lived to the east of the Dnieper.

Papers by Grakov and Schultz were devoted to the study of the history and archaeology of the Scythians. Grakov gave details of the results obtained from excavations at the Kamenskoye settlement, near Nilopol, which he carried out between 1938 and 1940. He discovered there the remains of a large Scythian town where artisans worked, but which retained constant contact with the nomads of the distant parts of Scythian territory. An interesting find was a blacksmith's shop, bearing evidence of the use of Krivoy Rog iron ore at the time of the Scythians.

A narrowly specialized paper by Schultz dealt with the sculptured portraits of the Scythian kings, which can now be identified with definite historical personages such, for example, as the Scythian king Skilur.

These, in brief, are the results of the sessions of the Institute of Archaeology and the Department of History and Archaeology of the Academy of Sciences of the USSR. They serve to show what a tremendous amount of historical material has been gathered by Soviet archaeologists and what valuable historical conclusions are to be drawn from a detailed historical study of this material. The sessions clearly demonstrated the importance of Soviet archaeological achievements.

VESVOLOD AVDIYEV



# THE DENARIUS OF M'. AEMILIUS LEPIDUS AND THE AQUA MARCIA

## PLATES VIII-IX

A WIDE divergence of opinion prevails concerning the identity of the structure represented by three arches surmounted by an equestrian statue that appears on the reverse of a denarius (pl. VIII and fig. 1), struck by M'. Aemilius Lepidus between 91 and 89 B.C.<sup>1</sup> Eckhel<sup>2</sup> believed that these arches represented the pons Aemilius. Mommsen<sup>3</sup> thought them a triumphal arch. Cavedoni<sup>4</sup> argued that they represented the rostra. Urlichs<sup>5</sup> identified them as an aqueduct, an extension of the aqua Marcia carried on arches across the pons Aemilius to the Trastevere. Jordan<sup>6</sup> accepted Urlich's identification as an aqueduct, but did not believe that they represented an extension of the aqua Marcia. More recent writers, rejecting the views of Cavedoni<sup>7</sup> and Urlichs,<sup>8</sup> have either returned to Eckhel's interpretation of them as the pons Aemilius,<sup>9</sup> or Mommsen's designation of triumphal arch,<sup>10</sup> or, else, have been content to refer to them simply as "three arches."<sup>11</sup>

The diversity of opinion that exists concerning this coin of Aemilius seems, however, to the present writer to result more from faulty method than from any inherent insolubility of the problem. Die-cutters, as is well-known, did not represent the structure they were reproducing in a uniform way. Sometimes die-cutters even omitted important details of a structure which other die-cutters of the same type repro-

<sup>1</sup> This is the date to which Grueber (*Coins of the Roman Republic in the British Museum*, which will be referred to hereafter as Grueber, 2,291,590-596, pl. 94.11, note 1) assigns this coin on the evidence of hoards. Babelon (*Monnaies de la République Romaine* 1,117,7) assigns it to 112 B.C. Mommsen (*Histoire de la Monnaie Romaine* 4, p. 45.1) assigns it to 114-104 B.C.

<sup>2</sup> *Doctrina Numorum Veterum* 5,127.

<sup>3</sup> *Op. cit.*, 2,345-346,155, note 4.

<sup>4</sup> *Nuovi Studi sopra le Antiche Monete Consolari e di Famiglie Romane* 14 (in *Opuscoli Religiosi, Letterarje, e Morali* 10,321-348, Modena, 1861). Page 14 of the reprint equals 334.

<sup>5</sup> *Sitzungsberichte der Akademie der Wissenschaften zu München* 1, 1870, pp. 482-483.

<sup>6</sup> *Topographie der Stadt Rom* 1, p. 414, note 27.

<sup>7</sup> Babelon (*op. cit.* 1, pp. 117-118) seems to give Cavedoni's identification a limited approval. Wegeli-Hofer (*Inventar der Münzsammlung des Bernischen historischen Museums in Bern, Die Münzen der Römischen Republik* p. 23, 83) describe the arches as the substructure of the rostra.

<sup>8</sup> W. Kubitschek (*Sitzungsberichte der Phil.-Hist. Klasse der Akademie der Wissenschaften, Wien* 167,1911,6.5, note 1) approves of Urlich's identification of the arches as an aqueduct, but attributes it to Jordan.

<sup>9</sup> Cohen, *Médailles Consulaires* 9,4; Klügmann, *Num. Zft.* 11,1879, pp. 209-212; Lugli, *I Monumenti Antichi di Roma e Suburbio* 2, p. 301; Delbrück, *Hellenistische Bauten in Latium*, p. 14, regards this identification as most unlikely. Huelsen, *RE.* 1, col. 593, and Platner-Ashby, *Topographical Dictionary*, which will be referred to hereafter as Platner-Ashby, pp. 397-398, do not mention the coin in their discussion of the pons Aemilius.

<sup>10</sup> Klebs, *RE.* 1, col. 550,61; Grueber 2,291,590, note 2; Münzer, *Römische Adelsparteien*, pp. 179-180.

<sup>11</sup> Liegle, *Antike* 12,1936, p. 209. Very recently in an article in *Studi di Numismatica* (1, 1942, pp. 194-195), which Mrs. G. K. Boyce kindly called to my attention while this article was in proof, Signorina Cesano has suggested that these arches represent a viaduct. She sees a parallel for the Aemilian arches in the coins of Augustus on which bridges or viaducts appear with the legend QUO VIAE MUN SUNT (fig. 3b, f, g). Signorina Cesano in reviewing previous interpretations of the Aemilian arches does not refer to the views of Urlichs, Jordan and Kubitschek which have been summarized above.





FIG. 1.—DENARIUS OF M. AEMILIUS LEPIDUS, ENLARGED FOUR DIAMETERS  
(W. P. Carpenter Collection)



FIG. 2.—DETAIL OF FIG. 1, ENLARGED ABOUT  $8\frac{3}{4}$  DIAMETERS



duced on their dies.<sup>12</sup> But, though they might freely omit details, or even distort them or their relation to each other, they did not add details which the building they were representing did not actually possess.<sup>13</sup> The condition of extant specimens also varies greatly, of course, from coin to coin. Details are visible on one specimen which are not to be seen on another. Finely preserved specimens of an architectural representation are unquestionably of great assistance to the student of these types, as well as a delight to the collector. Urlichs, indeed, was led by such a specimen<sup>14</sup> to what the writer believes is the correct identification of the character of the structure represented on the Aemilian denarius. But finely preserved specimens alone cannot always be relied upon to guide the student to the correct interpretation of the nature of the details of the structure represented. Urlichs' failure to realize how great was the number of the die varieties of Aemilius' coin<sup>15</sup> (cf. pl. VIII) probably contributed more than anything else to the all but complete neglect which his identification has suffered. Some dies of the Aemilian type were so cut and others are so preserved that there is little about them, when examined apart from other die varieties or other specimens of the same variety, to suggest an aqueduct (see pl. VIII).

A completely accurate reconstruction and a methodically sound interpretation of the arches represented on the denarius of Aemilius will result, therefore, only if all of its known die varieties are assembled and their collective detail accounted for.<sup>16</sup> This is, of course, an ideal. Practically, such a reconstruction will not be possible until a corpus of Roman coins comes into existence.

<sup>12</sup> This occurs on a specimen in the writer's collection of the denarius of L. Marcius Philippus (Grueber 1,485,3890-3895, pl. 48,17-18) on which the arches of the aqueduct have been omitted and the horizontal line is shown resting on straight piers (see fig. 5 c). Another die variety of the same denarius (Wegeli-Hofer, *op. cit.*, 88,428; fig. 5 f) omits the ground line. Again, on a die variety of an aureus of Augustus (see fig. 3 a) the arched passageway is omitted (Bahrfieldt, *Die Römische Goldmünzenprägung*, pl. 14,19 = Liegle, *Antike* 12,1936, p. 212 fig. 9 d; *Collection R. Jameson* 2, pl. 1,20; Rollin-Feuardent, *Sale Catalogue* 4/20/96, pl. 3,87) which is shown on other die varieties (Bahrfieldt, *op. cit.*, pl. 14,20 = Hess, *Sale Catalogue* 5/22/35, pl. 2,101; *Num. Chron.* 19,1939, pl. 13,1; *Riv. Ital. Num.* 25,1912, pl. 6,18; Santamaria, *Sale Catalogue* 11/29/20, pl. 4,216; and specimens in the Newell collection and in the trade). A similar omission occurs on a die variety of a denarius of Augustus on which the arch erected to commemorate the restoration of the standards of Crassus has been represented (cf. fig. 3 hh); Noack, *Vorträge der Bibliothek Warburg* 1925/26, pl. 38,1; Naville, *Sale Catalogues* 10/3/34, pl. 31,1157 and 6/25/24, pl. 11,468; Baranowsky, *Sale Catalogue* 2/25/31, pl. 34,1305; Basel Münzhandlung, *Sale Catalogue* 3/18/36, pl. 13,1525; Cahn, *Sale Catalogue* 12/3/28, pl. 11,647; and specimens in the Copenhagen collection (*Ramus* 2,1,132,109; the other does not appear in *Ramus*). For the usual representation see fig. 3 h and Mattingly, *British Museum Catalogue of the Coins of the Empire* i, pl. 10,2-3 = (2) Mattingly, *Roman Coins*, pl. 43,4 = Grueber pl. 63,11 = Hill, *Historical Roman Coins*, pl. 14, 89; (3) = Grueber pl. 63,12 = Mattingly-Sydenham, *The Roman Imperial Coinage* i, pl. 2,35; Noack, *loc. cit.*, pl. 38,2.

<sup>13</sup> The truth of this statement has been brilliantly demonstrated by Bluma L. Trell in her forthcoming publication on *The Temple of Artemis at Ephesus*, *passim*. <sup>14</sup> *Loc. cit.*, pp. 482-483.

<sup>15</sup> Twenty-two are represented among the twenty-four specimens available to me for study. Yet, because this coin is so rarely published, there is nothing in the publications to indicate this fact even today. The writer has been able to find only five published photographic reproductions of Aemilius' denarius (Grueber, pl. 94,11; Bahrfieldt, *Nachträge und Berechtigungen zur Münzkunde der Römischen Republik* i, pl. 1,8; Wegeli-Hofer, *op. cit.*, p. 23,83; Liegle, *Antike* 12,1936, p. 208, fig. 5 b; Cesano, *Studi di Numismatica* i, 1942, fig. 91). This compares with 116 published photographic reproductions known to the writer of the bronze of Nero on the reverse of which a triumphal arch is represented (*BMC. Empire* i, pl. 46,5 and pl. 48,4).

<sup>16</sup> The writer has been compelled by circumstances to content himself with far less. His requests for casts addressed to the chief European collections were, with one exception, overtaken by the outbreak





FIG. 3. — THE ARCHES AND BRIDGES REPRESENTED ON THE COINS OF AUGUSTUS, ENLARGED ABOUT 2 DIAMETERS  
(Alphabetical Designations run from Left to Right in Three Rows)

(a) A. M. Newell Coll.; (b) British Museum; (c) ANS; (d) ANS; (e) From Dattari, *Num. Augg. Alex.*, pl. 27, 13; (f) ANS.  
(g) British Museum; (h) Copenhagen; (hh) In the Trade; (i) Copenhagen



## I

The impression which the numerous die varieties of the Aemilian coin give is one of uniformity rather than divergence. All specimens show a dotted border; the legend *M · AEMILIO · LEP*; an equestrian statue facing right; a wreath about the rider's otherwise bare head; the long spear held in the rider's right hand and resting on the level course which runs across the crown of the arches; the cuirass worn by the rider — though this is clear only on finely preserved specimens (pl. VIII a, o); the three arches on which the statue stands; the uniform width of the spans of the three arches; the uniform level of the crown of the arches; the ground line, touching the border at each end, on which the piers of the arches rest; the termination of the outer two arches in a perpendicular line rather than continuation of the arches to the border; and the constant proportions of approximately 4:1 between statue and substructure. Even the numerous divergences in the relation of the letters of the legend to the statue and the position of the horse's feet to the substructure become noticeable only after study. The same may be said of the minute differences in the pose of the rider and the horse and the angle at which the long spear is held. But these slight differences have little or no relevance to the identification of the arches.

The most immediately obvious discrepancy in the representation of the three arches by the various die-cutters is the variation in the overall length of the substructure on which the horse stands. In some varieties, as in d, g, h, k, m, s, and t (pl. VIII), the result of the shorter length of the substructure is to make the three arches appear to be the base of the equestrian statue just wide enough to seem proportioned to the statue. In other varieties, however, as in a, b, c, e, f, i, j, l, o, p, q, and r (pl. VIII), the right arch extends considerably beyond the fore-feet of the horse.

The differences observable in the thickness of the central piers of the arches are to be accounted for by wear, as in e, l, q, and s (pl. VIII), though the well preserved specimens of varieties a, b, c, show that some die-cutters rendered the piers more solidly than others. Deviation from the perpendicular in the representation of the piers is observable in varieties c, e, g, m, o, p, and r (pl. VIII) which can hardly represent anything other than inaccuracies of the cutter. The extension of the outer right pier below the ground line in varieties c, h, and m, the obvious result of a slip of the cutter's tool, seems to confirm this explanation.

In all varieties the level course that runs across the arches rests directly upon the crown of the arches. In die variety m (pl. VIII) there seems to be a space between this course and the archivolts, but this appearance has been caused by wear, as varieties k and l suggest. They resemble m in an apparent space at this point, but preserve traces of the arches formed by the voussoirs.

The outline of the arches formed by the voussoirs appears very clearly in varieties a, b, c, g, h, i, t and even in k, l, and p (pl. VIII). The level course resting above the

of the war. That a considerable number of specimens could, nevertheless, be studied is due to the many courtesies shown the writer by the officers of the American Numismatic Society, by museum and college administrators, and by numerous American collectors in making their specimens of this coin available for study. To them the writer wishes to express here his warmest thanks.



crown of the arches is plainly seen in varieties a, b, c, g, i and p. The spandrels are well outlined in varieties a, b, c, h, i, p, and t (pl. VIII). The construction of the spandrels can be clearly seen in photographic enlargements made from casts of well preserved specimens of certain die varieties under lighting conditions arranged to bring out the minutest variations of this area (fig. 1). These enlargements show that the spandrels consisted of large, roughly rectangular blocks, the surface of which appears to have been rusticated. In the center of the two middle spandrels, moreover, perpendicular projections continuing the line of the piers below them are to be seen in varieties a, b, c ?, and i ? (fig. 2). These two details are conclusive for the identification of the structure represented by the three arches, as will appear later.

The earliest representations of bridges on coins, apart from the representation on the denarius of Aemilius, occur on three issues struck by Augustus which bear the legend QUOD · VIAE · MUN · SUNT<sup>17</sup> (fig. 3 b, f, g). The bridges or viaducts that appear on these coins are only sketchily represented at best, since the chief object of interest in the field is the triumphal arch surmounted by biga, quadriga, or equestrian statue. Later representations of bridges that appear on the coins of Trajan,<sup>18</sup> Hadrian,<sup>19</sup> Antoninus Pius,<sup>20</sup> Marcus Aurelius,<sup>21</sup> Septimius Severus,<sup>22</sup> Caracalla,<sup>23</sup> Alexander Severus,<sup>24</sup> Gordian,<sup>25</sup> and Constantine;<sup>26</sup> the colonial coins of Babba<sup>27</sup> and Buthrotum;<sup>28</sup> the coins of Antioch on the Maeander,<sup>29</sup> Mopsus,<sup>30</sup> and Aegae;<sup>31</sup>

<sup>17</sup> Mattingly, *BMC. Empire* i, pl. 10,7-8=Grueber, pl. 63,19-20; Mattingly, *op. cit.*, i, pl. 10,6=Grueber, pl. 63,18=Mattingly-Sydenham, *op. cit.*, i, pl. 2,33; Mattingly, *op. cit.*, i, pl. 10,9=Grueber, pl. 64,1.

<sup>18</sup> Mattingly, *op. cit.*, 3, pl. 32,1; pl. 35,2; Strack, *Untersuchungen zur römischen Reichsprägung des zweiten Jahrhunderts* 1, pl. 6,385; Bernhart, *Handbuch zur Münzkunde der Römischen Kaiserzeit*, pl. 95,4-5.

<sup>19</sup> Gneecchi, *I Medaglioni Romani*, which will be referred to hereafter as Gneecchi, 2, pl. 42,4; Bernhart, *op. cit.*, pl. 97,3.

<sup>20</sup> Gneecchi 2, pl. 43,4, 1-2; Toynbee, *The Hadrianic School* pl. 16,5.

<sup>21</sup> a) Gneecchi 2, pl. 61,1; pl. 66,2; Toynbee, *op. cit.*, pl. 16,12, b) Mattingly-Sydenham, *op. cit.*, 3, pl. 12,246; Bernhart, *op. cit.*, pl. 89,11.

<sup>22</sup> Gneecchi 2, pl. 94,1; Mattingly-Sydenham, *op. cit.* 4,1, pl. 10,9; Bernhart, *op. cit.*, pl. 95,6.

<sup>23</sup> *Ibid.*, 3, pl. 152,9.

<sup>24</sup> *Ibid.*, 2, pl. 101,5.

<sup>25</sup> *Ibid.*, 3, pl. 153,15.

<sup>26</sup> a) Gneecchi 2, pl. 130,6; Maurice, *Numismatique Constantinienne* i, pl. 9,9. b) Maurice, *op. cit.*, 2, pl. 16,11. c) Gneecchi i, pl. 7,2-3; Bernhart, *op. cit.*, pl. 97,6; Maurice, *op. cit.*, i, pl. 9,6.

<sup>27</sup> Mattingly, *Roman Coins*, pl. 48,6.

<sup>28</sup> Mionnet, *Description de Médailles Antiques* 2,52,52; Imhoof-Blumer, *Monnaies Grecques* 139,34. The writer has not been able to find a published photographic reproduction of this coin. Line drawings appear in Haverkamp, *Médailles du Cabinet de la reine Christine*, pl. 44, 26-27; *Revue Numismatique* 7,1889, pl. 8,3; and in *Nummi Imperatorum Romanorum*, pl. 8,26 (this volume is an unfinished collection of folio plates of the consular and imperial coins in the Imperial Collection of Russia published by Glenking. The plates of the consular and imperial coins are separately numbered. The copy in the library of the American Numismatic Society used by the writer bears neither the name of the author, the date, or the place of publication).

<sup>29</sup> B. Head, *BMC. Caria* 23,57, pl. 4,7 (Gallienus)=*BM. Guide to the Principal Coins of the Greeks*, 1932, pl. 48,17; Forrer, *The Weber Collection*, pl. 225,6370 (Gallienus; this coin is now in the ANS Collection); Grose, *McClellan Collection*, pl. 295,8 (Gallienus); Imhoof-Blumer, *Fluss- und Meerestötter auf griechischen und römischen Münzen*, pl. 9,25 (Trajan Decius); Liegle, *Antike* 12,1936, p. 215, fig. 12 a.

<sup>30</sup> Imhoof-Blumer, *op. cit.*, pl. 14,16 (Valerian).

<sup>31</sup> Mionnet, *op. cit.*, 3,547,53 (Valerian). The writer has been unable to find a published photographic reproduction or line-drawing of this rare coin. The outbreak of the war prevented the receipt of casts from Paris and Vienna where presumably specimens of it exist.



and on the great lead medallion of Diocletian and Maximian found at Lyons<sup>32</sup> are much more detailed and circumstantial. But because of their very sketchiness and chronological proximity to the denarius of Aemilius, the coins of Augustus constitute the best possible material for comparison.

On all three issues the arched structures run from border to border of the field. The central spans are represented with almost no die variation as wider than the side arches, as is true of most extant Roman bridges. The piers of the arches are without exception extended downward to the lower border. This again reproduces the appearance of extant bridges that cross deep valleys. None of the Augustan representations of bridges shows a ground line upon which the piers rest as they do on the denarius of Aemilius. The archivolts and their downward extension represented on two of the issues<sup>33</sup> (fig. 3 b, f) do not touch, but outline piers of considerable thickness. There is a hint of this even in some specimens of the third issue<sup>34</sup> (fig. 3 g). The surface of the spandrels and piers is represented as perfectly smooth. They give no hint as to the nature of their construction. The superstructure of the bridges does not rest directly on the crown of the supporting arches. There is a slight space between the horizontal line and the line of the crowns of the arches. In this regard, there is some die variation and even some variation in the relation of certain of the arches on a particular specimen to the superstructure. And, finally, the superstructure of the bridge is represented as consisting of two clearly distinguishable horizontal lines, the upper line being wider and suggesting a parapet.

Five of the divergences in the bridge representations on the Augustan coins from the representation on Aemilius' denarius which emerge from this analysis seem conclusive for rejecting Eckhel's interpretations of the type as a representation of the pons Aemilius. These are: 1) the absence of a groundline and the downward extension of the piers to the border; 2) the wider spans of the central arches; 3) the space between the highest point of the archivolts and the lower horizontal line of the superstructure; 4) the parapet-like upper horizontal line of the superstructure; and 5) the much greater thickness of the piers of the bridge representations.

The earliest certain representations of triumphal arches, apart from the coin under discussion, also appear on the coins of Augustus. His issues include nine types which show triumphal arches (fig. 3). Of these nine types five represent arches of one passageway (fig. 3 a-e); two represent arches of two passageways (fig. 3 f-g), and two represent arches of three passageways (fig. 3 h-i). With the exception of

<sup>32</sup> ZfN. 36, 1926, pp. 167-171, pl. 11, 4; *Arethuse* 4, 1927, pp. 4-10, pl. 1; Toynbee, *Roman Medallions*, pl. 9, 7.

<sup>33</sup> a) (fig. 3 f) Mattingly, *BMC. Empire i*, pl. 10, 7-8, which reproduce somewhat damaged specimens. Better specimens are published by Liegle in *Antike* 12, 1936, p. 212, fig. 9 a; Bourgey, *Sale Catalogue* 12/16/1913, pl. 1, 19; and *Riv. Ital. Num.* 25, 1912, pl. 6, 20. On the die variety represented by Návile, *Sale Catalogue* 6/12/22, pl. 4, 126, and a die variety represented by a specimen in the Copenhagen collection (*Ramus* 2, 1, 133, 122) the downward extensions of the archivolts are continuous and the pier is simply represented by a straight line. But the existence of specimens showing the piers rendered by double lines with space between certifies the fact that the structure possessed piers of considerable thickness. b) *BMC. Empire i*, pl. 10, 9 = Grueber, pl. 64, 1 are too poorly lighted to show that the downward extensions of the archivolts do not touch. The clearer reproduction in *Riv. Ital. Num.* 25, 1912, pl. 6, 21 (fig. 3 b) shows plainly, however, that there is space at these points.

<sup>34</sup> See Bahrfeldt's (*Die Römische Goldmünzungenprägung*, pl. 14, 18), illustration of the British Museum's specimen, which is a better lighted reproduction than *BMC. Empire i*, pl. 10, 6, and Laffranchi's illustration of the specimen in the Museo Nazionale at Rome (*Riv. Ital. Num.* 25, 1912, pl. 6, 19).



*c*, *d*, and *e*, which show pilasters flanking the archway and which seem to be representations of the same monument, as Laffranchi has pointed out,<sup>36</sup> all the arches represented show columns at the angles of the monument. Types *a*, *h*, *hh*, and, possibly,<sup>36</sup> *b*, show further that the passageway itself was flanked on each side by a column joined above by an architrave block. Types *f* and *g* show a column on the face of the pier between the two passageways. Types *h* and *i*, if they represent the identical monument as Eckhel and more recently Laffranchi believed,<sup>37</sup> are not in agreement on this point. Type *h* shows, besides a column at each angle of the outer passageways, a column between the central and side passageways. The central passageway is further flanked by a column on each side joined above by an architrave block. Type *i* seems to represent three separate units rather than a triple arch. The pediment and attic of the aediculae on each side are supported by columns, as is the attic of the central structure. And the archivolt of the central unit rests on columns. The archivolt is shown as extending downward to the ground line and ending in a column base in types *a*, *b*, *f-h*. Type *e* shows no archivolt, but on *c* and *d* a horizontal moulding seems to mark the point at which the voussoirs of the arch spring from the pier. The piers of all the arches represented on the coins of Augustus are shown as possessing considerable thickness.

The spans of the three passageways of the monument or monuments represented by types *h* and *i* are not of the same width. On specimens of all but one die variety the central passageway is wider than those on the sides. The height of the passageways is variously represented on different dies. On most dies of type *h* the two side passageways are represented as higher than the central arch. On one die variety, however, which omits the architrave block which joins the two columns flanking the central passageway, they are represented as of approximately equal height (fig. 3 *hh*). This is their representation also on contorniates.<sup>38</sup> Since it is hardly conceivable that the central arch was actually lower than the side arches,<sup>39</sup> the conclusion seems justified by the die variety represented by *hh* that the three arches were equal in height. If, however, the monument shown on type *i* is actually a representation of the same arch as that shown on type *h*, the central archway of the monument was higher than the side arches. This is the usual relation in extant arches.<sup>40</sup> In any case, there can be no doubt that the central span was wider than those on the side. The central pier or piers of arches of two and three passageways (fig. 3 *f-i*) are represented as thicker than the outer piers.

In types *a-e*, *g-i* there is a space, quite large in type *d* and *e*, smaller in the others,

<sup>36</sup> *Riv. Ital. Num.* 29, 1916, p. 289; Grueber 2, p. 551, note ad no. 310.

<sup>37</sup> Laffranchi's illustration of this rare type (fig. 3 *b*) seems to show extensions on each side of the passageway that continue to the attic. Grueber's illustration (pl. 64, 1) and that of Mattingly (*BMC. Empire i*, pl. 10, 9) are too poor to be of great assistance.

<sup>38</sup> *Riv. Ital. Num.* 27, 1914, pp. 317-318.

<sup>39</sup> J. Sabatier, *Description Générale des Médallions Contorniates*, pl. 17, 6.

<sup>40</sup> Its representation in this form with a lower central passageway was caused by the desire to include the architrave that surmounted it. Cf. the die variety illustrated by Santamaria, *Sale Cat.* 11/29/20, pl. 4, 211, which shows the attic, if not the arch, of the central portion appreciably higher than the side passages.

<sup>41</sup> Kähler, *RE. s.v. Triumphbogen*, col. 487; cf. col. 481 for his remarks on the arch represented on these coins.



between the highest point of the outline of the arch or the archivolt and the attic on which the statues rest. In type *g* the attic appears to rest directly on the archivolt. But this is to be explained, the writer believes, by lack of sufficient space in the field of the coin to permit the representation of the proper relationship of archivolt to attic.

The attic of the arches is variously represented. But in all it is shown as a member of considerable thickness, represented either as a thick member usually bearing an inscription, as in types *a-d*,<sup>41</sup> *h-i*, or by two lines, as in types *f-g*, or three lines as in type *e*.

All free standing arches (*c, d, h, i*) are represented as resting on ground lines. This is probably true also of type *e*, but the only specimen available to the writer for study is too damaged at this point to permit judgment. The surface of the triumphal arches, where it is undecorated by reliefs, appears in all types as smoothly finished.

In earlier discussions of Aemilius' denarius the interpretation that the three arches represent a triumphal arch has been rejected on two grounds: 1) the disproportionate relation between the equestrian statue and the arches, which is about 4:1; and 2) the improbability that a triumphal arch of three passageways would have been constructed at the beginning of the first century B.C.<sup>42</sup> Both objections are valid, but they do not seem to the writer to be conclusive. Certainly, Augustan representations of triumphal arches do not show a similar disproportion between surmounting statue or statues and the supporting monument. The proportions on the Augustan representations are approximately 1:1 or even 1:2. But no one familiar with the vagaries of die-cutters would be willing to assert that it was impossible for them to represent rider and base as disproportionately as 4:1. It is also true that the earliest known triumphal arch of three passageways is that erected in honor of Augustus in the Forum to commemorate the restoration of the standards of Crassus by the Parthians. This arch is represented on aurei and denarii struck in 18 B.C. (fig. 3 *h-hh* and *i* (?)). But this fact does not of itself prove that triumphal arches of three passageways did not exist at the end of the second century B.C.

The differences, however, between the arches shown on the denarius of Aemilius and the representations of triumphal arches on coins of Augustus revealed by the foregoing analysis do permit a conclusive judgment against Mommsen's interpretation. The following points are of particular significance: 1) the absence of columns or pilasters from the flanks of the piers of the Aemilian arches; 2) the absence of archivolt mouldings or their downward extension to the ground line;<sup>43</sup> 3) the extreme narrowness of the piers supporting the Aemilian arches — on some die varieties the piers even seem to end in a point (pl. VIII a, b, j); 4) the equal width of all three spans of Aemilius' arches; 5) the absence of any space between the highest point

<sup>41</sup> The condition of the specimens of type *a* (fig. 3) does not permit certainty as to whether an inscription appears in the attic or not. A specimen in the ANS collection and Santamaria, *Sale Catalogue* 11/29/20, pl. 4, 216 suggest the presence of an inscription at this point. Cohen (1,230) and Mattingly (*BMC. Empire* i, 75, ad 432) say nothing of a possible inscription.

<sup>42</sup> Ulrichs, *loc. cit.*; Jordan, *loc. cit.*

<sup>43</sup> Type *e* of fig. 3 does not show an archivolt either, though its absence may be the result of wear. But the piers are faced with pilasters and all three representations of this arch (fig. 3 *c-e*) show considerable space between the crown of the arched opening and the attic.



of Aemilius' arches and the level course resting upon them; 6) the absence from the Aemilian representation of anything resembling an attic; 7) the rusticated ashlar character of the construction of the spandrels of Aemilius' arches; and, finally, 8) the rough projections in the center of the spandrels of Aemilius' arches which find no parallel in the Augustan representations.

In evaluating Cavedoni's identification of the arches with the rostra it is possible to compare the denarius of Aemilius with the well-known representation of this monument that appears on a denarius struck by Lollius Palikanus about 47 B.C. (fig. 4).<sup>44</sup> On all die varieties available to the writer for study the lower part of the rostra is represented by four slender Ionic columns extending upward from the border. To the first three columns from the right, ship's beaks are attached facing left and filling the intercolumniations. The columns are joined by three arches which continue to the border on each side. Thus, the rostra was faced by at least five arches. Above the arches run two or, on some varieties, three curving and roughly parallel lines. On some varieties both lines are represented as beaded, to suggest dentils perhaps. On others the lower line is beaded and the upper is plain. And still others show both lines unbeaded. On those varieties which show three lines either all are beaded or the central line is beaded. Above these lines stands a bench.

The representation on the denarius of Palikanus has been universally interpreted as the rostra situated on the edge of the forum and the old comitium.<sup>45</sup> That the representation on Aemilius' coin does not show the same building as that on the denarius of Palikanus is proved by the complete absence of columns of any kind from the Aemilian structure; the absence of ship's beaks, since the projections in the center of the spandrels of Aemilius' arches cannot be considered such, as will appear; <sup>46</sup> the absence of the step-like superstructure above the arches represented by two or three lines shown by the coins struck by Palikanus; and the curving rather than straight line which the columns of the Palikanian representation follow.

Were it not for the problem of a Sullan reconstruction of the republican rostra,<sup>47</sup> Cavedoni's interpretation could be rejected at once. But, if the semicircular form of the rostra is accepted as a Sullan reconstruction, the representation shown on Palikanus' denarius cannot, obviously, be invoked as decisive evidence against Cavedoni's view, since Aemilius' coin must be dated at least ten years before Sulla's death. The remains of the rostra that preceded the semicircular reconstruction, whether Sulla's or earlier, seem to show, however, that this structure was about 1.30 to 1.40 m. high.<sup>48</sup> Nothing has been preserved in them to suggest that the earlier rostra had an arched façade.<sup>49</sup> Nor is it easy to see why, if the absence of positive

<sup>44</sup> Grueber, 1,517-518,4011-4013, pl. 50,18 = Mattingly, *Roman Coins*, pl. 21,19.

<sup>45</sup> Jordan, *op. cit.*, 1,2,355, note 64; Huelsen, *The Roman Forum*, 1906, pp. 69-70, figs. 26, 30; Ruggero, *Il Foro Romano*, p. 352; Haug, *RE*, 2,1, col. 454; Platner-Ashby, p. 451; Grueber, *loc. cit.*; Mattingly, *op. cit.*, p. 86, pl. 21,19.

<sup>46</sup> Cavedoni (*loc. cit.*) did not, however, take note of these projections. He argued that the structure of Aemilius represents the rostra on other grounds. He explained the absence of ship's beaks as having been caused by the moneyer's desire to place the letters LEP within the structure's arches.

<sup>47</sup> Van Deman, *JRS*, 12,1922, pp. 1-31; Haug, *RE*, 2,1, col. 454; Huelsen, *RM*, 20,1905, p. 36, pl. 2; Frank, *Roman Buildings of the Republic*, pp. 61-66; Platner-Ashby, p. 451, and cf. pp. 135-136.

<sup>48</sup> Van Deman, *loc. cit.*, p. 21; Haug, *loc. cit.*, col. 451; Platner-Ashby, *loc. cit.*

<sup>49</sup> *Ibid.*, pp. 21-22; Huelsen, *loc. cit.*, pp. 29-35.





FIG. 4. — DENARIUS OF LOLLIVS PALIKANVS, ENLARGED ABOUT 2 DIAMETERS  
 (Alphabetical Designations run from Left to Right in Two Rows)  
 (a-b) Columbia University; (c-e) ANS; (f) F. S. Knobloch Coll.



evidence for an arched façade in the scant remains and in the literature is considered inconclusive, a structure so low as the earlier rostra would have been faced with arches. Thus, Cavedoni's interpretation of Aemilius' denarius, which he made at a time when the complex history of the rostra had not yet been revealed by excavation, must also be rejected.

There remains the view of Ulrichs, accepted by Jordan and Kubitschek, that the Aemilian structure represented an aqueduct. Two moneyers of the *gens Marcia* struck coins during the first century B.C. which show structures that, in one case possibly, in the other certainly, represent an aqueduct. The earlier coin,<sup>50</sup> an *as* struck by C. Marcius Censorinus about 87 B.C., shows two arches. Within the left one is a spiral column surmounted by a figure of Victory holding a wreath and a palm branch. Through the right arch passes the prow of a ship above which is a crescent. The interpretation of this coin is far from certain in all its details. But the arches are usually explained as representing the aqua Marcia. The representation of portraits of Numa Pompilius and Ancus Marcius on the obverse seems to lend weight to this view, since according to legend Ancus Marcius was the first Roman to project the building of an aqueduct.<sup>51</sup>

About the later coin, however, a denarius struck by L.<sup>52</sup> Marcius Philippus about 56 B.C.,<sup>53</sup> there can be no doubt. The legend AQUA MAR appears prominently between the intercolumniations of the arched structure represented on its reverse (fig. 5). In this coin we have an indisputable representation of the Aqua Marcia. It is represented as a series of arches,<sup>54</sup> ranging in number from five to seven. The piers of the arches rest on a ground line, though on variety *f* (fig. 5) the ground line is missing, an obvious misunderstanding, as the other varieties show, on the part of the die-cutter of his model. Above the spandrels runs a thick, horizontal line. On the finely preserved specimen in the collection of Columbia University (fig. 5 *b* and fig. 6) the right hand portion of this line adjoining the border clearly shows the ashlar courses of which the spandrels of the Marcia were constructed. On most die varieties the spandrels are finished with a smooth surface. But on variety *b* a perpendicular projection appears in the center of each spandrel which continues the line of the piers (fig. 6). The arches, piers, and the horizontal line of the *specus* above them are continued to the border. Resting upon this horizontal line is shown an equestrian statue facing right. The proportion between the statue and the supporting arched structure is slightly over 2:1. Beneath the upraised forefeet of the prancing horse appears a flowering plant.

Comparison of the arched structure on the denarius of Aemilius Lepidus with that on the denarius of Marcius Philippus shows that the two sets of arches are similar detail for detail. Both structures rest on a ground line. In both representations the arches are supported by slender piers which are undecorated by columns or pilasters. In both sets of arches the voussoirs spring from a point high up on the piers, though this point is slightly higher on the representation of Philippus. In both coins the

<sup>50</sup> Grueber 1,306,2410-2420, pl. 37, 17.

<sup>51</sup> Pliny, *NH.* 31, 41.

<sup>52</sup> The praenomen Lucius is by no means certain. See Grueber 1,485 note 1 and Kubitschek, *loc. cit.* 7.

<sup>53</sup> Grueber 1,485,3890-3895, pl. 48, 17-18.

<sup>54</sup> For the absence of the arches on one die variety see note 12.





FIG. 5. — DENARIUS OF MARCUS PHILIPPUS, ENLARGED ABOUT 2 DIAMETERS

(Alphabetical Designations run from Left to Right in Two Rows)

(a) University of Colorado; (b) Columbia University; (c) M. Stuart Coll.; (d) Boston, Museum of Fine Arts; (e) Smith College; (f) ANS



line of voussoirs is clearly demarcated from the spandrels. In both reproductions the width of the spans is approximately equal, though on some die varieties of Marcius' coin, the letters of the legend *AQUA MAR* caused the die cutters to expand slightly the width of certain of the arches (fig. 5 *a, d-e*). In both structures the horizontal line above the arches which represents the channel of the aqueduct rests in most specimens directly on the crown of the arches. In some varieties of the Marcian representation, however, the thickness of this line is proportionately greater. In both representations an equestrian statue disproportionately larger than the substructure stands upon the horizontal line above the arches. The disproportion between statue and substructure on the coin of Philippus is slightly greater than 2:1. In the Aemilian representation it is about 4:1. And, finally, the perpendicular projections in the center of the spandrels of the Aemilian structure, that had no parallel in representations of other arched structures, also appear in certain die varieties of the denarius of Philippus (fig. 5 *b, e* and fig. 6). What these projections represent is made immediately



FIG. 6.—DENARIUS OF MARCIUS PHILIPPUS, ENLARGED ABOUT  $4\frac{1}{4}$  DIAMETERS  
(Columbia University)

clear by an examination of the extant remains of a portion of the Aqua Marcia at Ponte Lupo (fig. 7) which Miss Van Deman assigns to the original structure of 144 B.C.<sup>55</sup> They reproduce the buttresses that appear there in the center of the spandrels above the piers.

On Aemilius' representation of the arches of the aqueduct the outlines of the large rusticated rectangular blocks of which the spandrels of these early portions of the Aqua Marcia at Ponte Lupo are constructed are clearly visible in enlargements of the better preserved specimens (fig. 2). Similar ashlar courses of the spandrels are also discernible in enlargements of well preserved specimens of certain die varieties of the denarius of Marcius Philippus (fig. 6). Both the Aemilian and the Marcian representations reproduce the sharp demarcation between the curvilinear

<sup>55</sup> Van Deman, *The Building of the Aqueducts of Rome*, pp. 95-96, pls. 14, 20 and the frontispiece; Ashby, *Aqueducts of Ancient Rome*, p. 118, note 2, pls. 3b, 5. These arches are also illustrated in Lanciani, *The Ruins and Excavations of Rome*, fig. 21.



outline formed by the voussoirs of the arches and the horizontal lines of the headers and stretchers of which the spandrels are constructed.

The statues above the representations of the aqueduct are not the same, since they neither formed part of the aqueduct nor appeared on it, as will be shown later. The flower that is to be seen beneath the fore-feet of the horse in the representation on the coin of Philippus has been identified as the miraculous flower at the touch of which Juno became pregnant with Mars, a punning allusion to the *gens Marcia*.<sup>56</sup>



FIG. 7.—THE AQUA MARCIA AT PONTE LUPO  
(From Van Deman, *The Building of the Aqueducts of Rome*, Pl. xiv)

The coin representations differ, however, in the number of arches of the aqueduct reproduced. The coins of Aemilius always show three arches which do not continue to the border, while those of Marcus Philippus show either five, the usual number, or seven arches which are continued on each side to the border. This discrepancy has a significance of its own, to which reference will be made later.

## II

The question now remains, if the identification of the Aemilian representation as an aqueduct is accepted, which of the four aqueducts in use when Aemilius struck

<sup>56</sup> Ovid, *Fasti* 5, 229-260; Longpérier, *Oeuvres* 2, pp. 235-236; Kubitschek, *loc. cit.* 2, note 3, 4-5; Grueber 1, pp. 485-486, note 1.



his denarius is represented by the arches on his coin. The four possibilities are the Aquae Appia, Anio Vetus, Marcia, and Tepula.

The Anio Vetus can be eliminated at once. Frontinus differentiates in his description of the terminal supports of the channels of the Roman aqueducts between *substructio* and *opus arcuatum*.<sup>57</sup> The final portion of the channel of the Anio Vetus, he says, was carried for two hundred and twenty-one paces on *substructio*.<sup>58</sup>

The last sixty paces of the Appia's channel, according to Frontinus,<sup>59</sup> was carried on *substructio* and *arcuatura*.<sup>60</sup> *Arcuatura* suggests a lower form of arched structure than *opus arcuatum* similar to that of the Marcia at Roma Vecchia,<sup>61</sup> since Frontinus uses it only in this passage in describing the channels of the aqueducts in operation in his day. This seems confirmed by the extant remains of the Appia.<sup>62</sup> In any case, the channel of the Appia which Frontinus saw had undergone reconstruction more than once since the beginning of the last century B.C.

The channel of the Marcia was carried in its terminal portion on *substructio* for five hundred and twenty-eight paces, and on *opus arcuatum* for six thousand four hundred and seventy-two paces.<sup>63</sup>

The original channel of the Tepula, which in all probability entered the city on arched structures,<sup>64</sup> had already disappeared in Trajan's day. Frontinus has nothing to say about the exact length or the construction of its channel;<sup>65</sup> and none of its original *specus* has ever been found.<sup>66</sup>

Thus, of the four aqueducts that entered the city in 90 B.C., the terminal portion of the Appia was almost certainly not supported by arches, that of the Marcia was certainly supported by arches, and that of the Tepula was probably supported by arches. The candidates are, therefore, reduced to two: the Marcia and the Tepula. But positive identification of either of these two conduits as the model of the Aemilian representation is possible only if it can be shown that M'. Aemilius had some special reason for representing one of them on his widely circulated denarius.

Aemilius' personal interest in any of these aqueducts could not possibly, on the basis of the evidence that we possess about them, have extended beyond the repair or reconstruction of one of them. But, even if the sources furnished the slightest evi-

<sup>57</sup> Frontinus, *De Aquis* 1,5 (Appia: *supra terram substructio et arcuatura proximum portam Capenam*); 1,6 (Anio Vetus: *substructio supra terram passuum ducentorum viginti unius*); 1,7 (Marcia: *longius ab urbe . . . opere arcuato passuum quadringentorum sexaginta trium, propius urbem a septimo miliario substructione passuum quingentorum viginti octo, reliquo opere arcuato passuum sex milium quadringentorum septuaginta duum*). Frontinus had no information, apparently, on the Tepula's earlier construction (1,8). For the later aqueducts he uses the same two terms: *substructio* and *opus arcuatum* (1,9,10,11,14, 15).

<sup>58</sup> *Ibid.* 1,6. Traces of these substructions have been found at various points (Van Deman, *op. cit.*, pp. 54, 58, Text cut 7; and cf. Ashby, *op. cit.*, pp. 80-81).

<sup>59</sup> *Ibid.* 1,5.

<sup>60</sup> Bennett, in his edition of Frontinus for the Loeb Classical Library, prints *opus arcuatum* (p. 340) without any explanatory note. The reading of C (Monte Cassino 361) is unmistakably *arcuatura*. See Herschel's excellent facsimile of C (*Frontinus and the Water Supply of the City of Rome*<sup>2</sup>, pl. 2, line 2); and cf. Krohn's Teubner edition, 1922.

<sup>61</sup> Van Deman, *op. cit.*, pl. 22, figs. 1-2.

<sup>62</sup> Ashby, *op. cit.*, p. 52; cf. p. 81 on the substruction of the Anio Vetus.

<sup>63</sup> Frontinus, 1,7.

<sup>64</sup> Frontinus (1,8) merely says that it was brought to the city in its own channel. But, since its water was brought to the Capitoline (*ibid.*), its channel must have been borne on arches for a considerable distance from the city. Frontinus, at any rate, says (1,18) in speaking of the Anio Vetus that it could have supplied the higher points of the city if it had been raised on substructures or arches where valleys and depressions demanded it.

<sup>65</sup> *Ibid.*

<sup>66</sup> Ashby, *op. cit.*, p. 160.



dence of such work on his part, the typological idiom of the moneyers of the period was not yet sufficiently rich to convey such an immediately personal idea to the users of their coins. The reverse types of the late second and early first centuries B.C. speak of family, gentile—not personal—achievements, and those ancestral rather than contemporary.<sup>67</sup> Later, from 72 B.C. on, allusions in the coinage to contemporary events become very numerous.<sup>68</sup>

The arches and the equestrian statue on the reverse of Aemilius' denarius, circled by M'. AEMILIO and framing LEP within the piers, could, then, have been intended and understood only as a reference to a monument or monuments associated with the Aemilii Lepidi. Any attempt to identify the aqueduct represented by the arches on the denarius of M. Aemilius must become, therefore, an effort to demonstrate the connection of the Aemilii Lepidi with the water supply of the city.

At first sight, nothing could seem more hopeless. Even Frontinus is unable to give much information about the Tepula.<sup>69</sup> And the construction of the Marcia is universally attributed, until the very late empire,<sup>70</sup> to Q. Marcius Rex, urban praetor in 144 B.C.<sup>71</sup> Pliny does say, however, that the Marcia once went by another name.<sup>72</sup> It was, he writes, formerly called the Aufeia. Without entering into the correctness of this appellation at this point, Pliny's statement shows that there was a pre-Marcian chapter in the history of the aqueduct that later bore Marcius' name.

From Livy we learn that the censors of 179 B.C., M. Aemilius Lepidus and M. Fulvius Nobilior, let contracts from a joint fund for the building of an aqueduct and the construction of its terminal arches.<sup>73</sup> The completion of the aqueduct was blocked, however, by the refusal of M. Licinius Crassus to grant them a right of way through his property.

This passage of Livy shows that an Aemilius Lepidus had planned as censor the construction of a third aqueduct.<sup>74</sup> The mention of arches shows further that he and his colleague contemplated the construction of a high-level aqueduct of the type of which the later Marcia was the first Roman example. Since specific funds and contracts were known to Livy, we may be sure that the construction of the aqueduct proceeded under the terms of those contracts outside the boundaries of the property of Crassus. Aemilius and Fulvius no doubt hoped that the opposition of Crassus could be overcome eventually.

<sup>67</sup> Grueber 1, lxxxvi–lxxxviii, xc–xci. The only exception is the denarius of L. Calpurnius Piso and Q. Servilius Caepio (Grueber 1, lxxxviii–lxxxix, lxxi; 170, 1125–1128, pl. 29, 12) on which they allude to the *lex frumentaria* authorizing the state sale of grain at a *semis* and a *triens* per *modius*. But they made the significance of their reverse type unmistakable by adding the legend: AD · FRU · EMU · EX · S · C.

<sup>68</sup> Grueber xci–xcii.

<sup>69</sup> *De Aquis* 1, 8–9.

<sup>70</sup> Polemius Silvius (Mommsen, *Chronica Minora* 1, p. 546).

<sup>71</sup> For the ancient references to the Aqua Marcia see Platner-Ashby, pp. 24–27, and Ashby, *op. cit.*, pp. 88–94.

<sup>72</sup> *NH.* 31, 41: *clarissima aquarum omnium in toto orbe frigoris salubritatisque palma praeconio urbis Marcia est, inter reliqua deum munera urbi tributa. vocabatur haec quondam Aufeia, fons autem ipse Pitonia.*

<sup>73</sup> 40, 51, 7: *habuere et in promiscuo praeterea pecuniam. ex ea communiter locarunt aquam adducendam fornicesque faciendos. impedimento operi fuit M. Licinius Crassus qui per fundum suum duci non est passus.*

<sup>74</sup> Ashby, *op. cit.*, p. 11, note 1, rightly rejects Gilbert's interpretation (*Geschichte und Topographie der Stadt Rom* 3, p. 268, note 3) of this passage as an enlargement of the water supply furnished by the Appia and the Anio Vetus.



Thirty odd years after Aemilius and Fulvius were prevented from completing their aqueduct, we learn from Frontinus <sup>76</sup> that another M. Aemilius Lepidus, identified by Münzer as M. Aemilius Lepidus Porcina the consul of 137 B.C.,<sup>76</sup> was instrumental in achieving the defeat of the decemviral opposition in 143 B.C. to the extension of the Marcia to the Capitoline.<sup>77</sup> Thus, we find a second Aemilius Lepidus, this time in association with Q. Marcius Rex, interested in the improvement of Rome's water supply.

If we now examine more carefully the account which Frontinus gives of the construction of the Marcia, we shall find that the circumstances connected with it are in several respects without parallel in the history of the other republican aqueducts. First, Q. Marcius Rex is the only praetor who is recorded as the builder of a republican aqueduct. All the other Roman aqueducts built before the empire were the work of the censors.<sup>78</sup> Secondly, when Marcius found the single year of his praetorship insufficient for the completion of his restoration of the Appia and the Anio Vetus and the construction of his new aqueduct, his imperium was unprecedentedly renewed for another year.<sup>79</sup> The only comparable republican example of such re-

<sup>76</sup> *De Aquis*, 1,7. The text of this passage varies sufficiently in different editions to warrant reproducing here the text of the Monte Cassino MS (361), referred to by editors as C, which is the ultimate source of our knowledge of this work of Frontinus (cf. Buecheler's and Krohn's praefationes [Teubner, 1858, 1922]). It has long been available in Herschel's facsimile (*op. cit.*) and, more recently, in the edition, which has not, however, been available to the writer, of M. Inguañez, *Sexti Iulii Frontini de Aquaeductu Romae*, editio phototypica ex Codice Casinensi 361, Monte Cassino, 1930. It reads: *Eo tempore decemviri (decemvira C), dum aliis ex causis libros sibillinos inspiciunt, invenisse (inventi C) dicuntur non esse aquam marciam seu potius anionem—de hoc enim constantius traditur—in capitolium perducere (perducendam Iocundus; perducendum Buecheler; non esse (fas) . . . perducere, Schoene). deque ea re in senatu m. lepidus (senatum lepidus C) pro collega (collegio Pighius, Schoene) verba faciente actum, appio claudio, q. cecilio consulibus; eandemque (eademque C) post annum tertium a lucio lentulo retractatam, c. laelio (lelio C), q. servilio consulibus, sed utroque tempore vicisse gratiam marcii regis, atque ita in capitolium esse aquam perductam.* Reference is also made to the dispute over the Marcia in the Oxyrhynchus Epitome of Livy (Grenfell and Hunt, *Oxyrhynchus Papyri* 668. 188–190 and p. 113; E. Kornemann, *Klio*, Beiheft, 2,30–31, 188–190, 63; O. Rossbach, *T. Livi Periochae Omnium Librorum* 142–143. 188–190). It reads:

. . . inae devota est aqua Anio, aqua  
Marcia in Capitolium contra Sibyllae carmina  
perducta.]

The writer has discussed the possible restoration of . . . inae to cecidit. *M. Porcinae* elsewhere (*CP*, xxxix, 1944, pp. 40–44). But, while the acceptance of this restoration would further associate M. Aemilius Lepidus Porcina with the Marcia, its rejection in no way affects the evidence on this point supplied by Frontinus.

<sup>78</sup> *Römische Adelsparteien* 238–245; for the rest of Porcina's career see Klebs, *RE* 1.566.83.

<sup>77</sup> The writer follows Münzer here in rejecting (*op. cit.*, pp. 238–241) the emendation of the MS's *collega* to *collegio* (Pighius, *Annales Romanorum* 2, p. 471, which has not been available to the writer, and Schoene, *Hermes* 6, 1872, pp. 248–249). The only point in favor of *collegio* is the argument that the praetor would not be, strictly speaking, the colleague of a praetor whose imperium to be exercised in the city had been prorogued for a year. But in considering a unique and unparalleled example of such prorogation, it is slightly Procrustean to insist that a man serving in the same place and with the same power, perhaps even in the same jurisdiction as in the previous year, would not still be the colleague of the new praetors. Pliny, at any rate, says (*NH*.31,41; 36,121) that Marcius built his aqueduct in his praetorship. It is just as possible that in the words *praetura* and *intra praeturae suae tempus* he is embracing both years of Marcius' imperium as it is that he has made an error.

<sup>79</sup> Frontinus 1,5,6,7;8. Ashby, *op. cit.*, p. 41, note 5, inadvertently lists the Marcia among the aqueducts built under supervision of the censors.

<sup>78</sup> Frontinus 1,7: . . . et quoniam ad consummandum negotium non sufficiebat spatium praeturae, in annum alterum est prorogatum. For the unprecedented character of the renewal of imperium to be exercised within the pomerium, see Mommsen, *Staatsrecht* 1, p. 637,1.



newal of imperium to be exercised within the pomerium occurred in 211 B.C. when, as Hannibal neared the gates of Rome, the senate decreed that the proconsul, Q. Fulvius, might enter the city without loss of imperium.<sup>80</sup> Thirdly, the Marcia is the only one of the republican aqueducts whose construction was initiated by senatorial decree.<sup>81</sup> The Anio Vetus was, indeed, *completed* by duumvirs appointed by the senate for that purpose after the death of one of the censors and the expiration of their term of office.<sup>82</sup> But the Appia, Anio Vetus, and the Tepula were all initiated by censors. Fourthly, the decree of the senate as quoted by Frontinus did not authorize Marcus to build a third aqueduct, but: *ut curaret, quatenus alias aquas quas posset in urbem perduceret*, a clause that suggests the addition of new springs to the older conduits.<sup>83</sup> And fifthly, the proposal to extend the Marcia to the Capitoline in 143 B.C. was strongly opposed on the ground that the Sibylline books forbade it.<sup>84</sup> This opposition was unsuccessfully renewed in 140 B.C. The Tepula, however, was brought to the Capitoline in 125 B.C. without objection of any kind.<sup>85</sup>

In the light of these anomalies and the evidence that the censors Aemilius and Fulvius had begun construction of a third aqueduct in 179 B.C., Pliny's statement that the Marcia was once known by another name assumes new significance. The fact that the Anio Vetus was begun by censors but completed on the authorization of the senate by duumvirs, while the Appia and the Tepula, both short aqueducts, were begun and completed by censors, suggests the possibility that Marcus did not build a new third aqueduct but merely completed the aqueduct begun by Aemilius and Fulvius.<sup>86</sup> This explanation of Marcus' achievement is strongly corroborated by an analysis of the length of time required for the construction of Rome's more important aqueducts.<sup>87</sup>

<sup>80</sup> Livy 26,9,10.

<sup>81</sup> Frontinus 1,5,6,7,8.

<sup>82</sup> *Id.* 1,6.

<sup>83</sup> *Id.* 1,7. If a specific third aqueduct had been intended, the singular would have been used. Cf. Frontinus' usage of the singular in referring to the letting of contracts or the building of specific aqueducts (the references are to Krohn's edition: 6,17,21,22; 7,17,5 (on p. 6, though, this could mean simply water in general); 8,26; 9,8,9; 11,25). Cf. also Livy's language (40,51,7) in referring to the aqueduct of M. Aemilius Lepidus and M. Fulvius Nobilior.

<sup>84</sup> The possible origin of the conflict which Frontinus found in his sources concerning the Anio or the Marcia is not relevant here. The writer has discussed the question in the paper mentioned above on the Oxyrhynchus Epitome. For the problem at hand, it is sufficient that Frontinus makes it perfectly clear that in his opinion it was the Marcia and not the Anio that was banned. In a later discussion (1,18) of the Anio's level, he makes it equally clear that the Anio had not, as late as his day, been brought to the Capitoline.

<sup>85</sup> Frontinus 1,8.

<sup>86</sup> Lanciani, "Le Acque e gli Acquedotti" (*Atti R. Accad. d. Lincei* 4,1880) p. 309, suggests that Marcus was chosen for the task because his position as praetor urbanus would facilitate the handling of legal disputes resulting from the reclamation of the Appia and Anio Vetus from illicit diversion by private individuals. Then, once Marcus had entered upon his enterprise of reclamation and "had his hands in the dough," as Lanciani puts it, he was allowed to build a third aqueduct. But in 184 B.C. this same task of reclamation was performed by the censors, *not* by a praetor (Livy 39,44,4).

<sup>87</sup> The evidence which a comparison of the cost of the Aqua Marcia and that of the other aqueducts might be expected to yield concerning the extent of the new construction required for the completion of the Marcia in 143 B.C. is rendered inconclusive by too many unknown factors. The cost of only the Marcia and Claudia-Anio Novus is recorded in the sources. Both sums are uncertain textually. As Schulze emends the text of Frontinus (1,7), the cost of the repair of the two old aqueducts and the construction of the Marcia was 180,000,000 sesterces (the reading of C is: *mine octingente. S.*). The cost of the Claudio-Anio Novus appears in some MSS of Pliny (*NH.* 36,122) as 350,000,000 sesterces and as 55,500 in most others. Besides textual difficulties, there is the further difficulty of equating the relative



Frontinus gives the following figures for the length of the aqueducts of his day: the Appia, 11,190 paces (16.61 kil.);<sup>88</sup> the Anio Vetus, 43,000 paces (63.64 kil.);<sup>89</sup> the Marcia, 61,710½ paces (91.3 kil.);<sup>90</sup> the Claudia, 46,406 paces (68.75 kil.);<sup>91</sup> and the Anio Novus, 58,700 paces (86.87 kil.).<sup>92</sup> For the Tepula, Iulia, Virgo, and Alsietina either the figures for the length of their channel or the time required for their construction are not given. In any case, they were all relatively short aqueducts. The Marcia was, therefore, the longest of Rome's aqueducts.

The Appia, the shortest of the aqueducts listed above, was not finished after the censors had been in office a year and a half.<sup>93</sup> At that time Appius Claudius, according to Frontinus, induced his colleague, C. Plautius, to resign under the impression that he would do likewise. Appius then prolonged his own term by various subterfuges until he was able to complete his aqueduct and his more famous road.<sup>94</sup>

In 270 B.C., when the Anio Vetus was still unfinished two years after the original contract had been let for it, the senate voted on the motion of a praetor to appoint M'. Curius Dentatus, one of the censors who had begun its construction, and Fulvius Flaccus as a board of two to complete the aqueduct.<sup>95</sup> Curius died, however, five days after his appointment and Fulvius received the credit for its completion. Since Appius could not complete the Appia in eighteen months, an aqueduct which was only a fourth as long as the Anio Vetus, there can be no doubt that the Anio Vetus was completed considerably later than 269 B.C.

The conduit of both these aqueducts was almost completely underground.<sup>96</sup> They did not require, therefore, any extensive masonry support above ground which would have required slow and careful construction by skilled workmen.

---

value of money in 144 B.C. and 38-52 A.D. Nor is it possible to know how much of the sum allowed Marcius was absorbed by repairs to the Appia and the Anio Vetus.

<sup>88</sup> *De Aquis*, 1,5.

<sup>89</sup> *De Aquis* 1,6. This was the length in the time of Trajan. Ashby believes, however, (*op. cit.*, pp. 56-58) that its original line was much longer, a conclusion in which Miss Van Deman concurs (*op. cit.*, p. 31), and proposes to emend Frontinus' figure to 53,000 paces. Richmond, however, points out (*ibid.*) that Ashby's admission that the distance between cippi might be less than 240 feet vitiates the entire argument. Frontinus thought that even 43,000 paces was a length so disproportionate to the distance of the Anio Vetus' source as to require an explanation, namely: considerations of level.

<sup>90</sup> *De Aquis* 1,7. Ashby believes (*The Builder* 94, 1908, p. 64 and *op. cit.* p. 94) that the length recorded by Frontinus approximates that of its original conduit.

<sup>91</sup> According to the inscription over the Porta Maggiore (*CIL* 6, 1256) the length of the Claudia was 45,000 paces (69.75 kil.) and Pliny (*NH* 36, 122) says it was 40,000 paces (59.02 kil.). Albertini (*Mélanges d'archéologie et d'histoire* 26, 1906, pp. 307-311) believes that the discrepancy between the figures of Claudius and Frontinus arose because Frontinus reckoned from the higher source, the *fons Albulinus*, added after the time of Claudius.

<sup>92</sup> *De Aquis* 1,15. According to the inscription over the Porta Maggiore (*ibid.*), the length of the Anio Novus was 62,000 paces. Albertini (*loc. cit.*, pp. 311-318) suggests that Trajan also lengthened the Anio Novus after the publication of Frontinus' work (*De Aquis* 2,93) and changed the reading of the inscription from LIX to LXII.

<sup>93</sup> Frontinus 1,5.

<sup>94</sup> *Ibid.* Leuze (*Zur Geschichte der Römischen Censur*, Diss. Halle, 1912, pp. 8-23) discusses at length the problems connected with the censorship of Appius Claudius and C. Plautius. Cram, in his recent study on the censors (*HSCP*, 51, 1940, p. 82), follows Mommsen in the conclusion that Appius was acting quite legally in prolonging his term of office.

<sup>95</sup> Frontinus 1,6. A recently discovered fragment of the *Fasti Capitolini* shows that Frontinus is in error concerning the identity of the colleague of M'. Curius Dentatus (Mingazzini, *NS*, 1, 1925, pp. 376-381). But see Cram's objections to this interpretation (*op. cit.*, pp. 85-86, note 2).

<sup>96</sup> Frontinus 1,5,6.



The Claudia and the Anio Novus resemble the Marcia much more closely in length of conduit, sources, and in being high-level aqueducts requiring a long series of arches above ground to support the terminal section of their channel. The length of the Marcia's channel above ground near the city was 7,000 paces.<sup>97</sup> Elsewhere its channel was borne on arched structures for a total distance of 463 paces.<sup>98</sup> The terminal portions of the Claudia and the Anio Novus, which were carried on the same line of arches, were above ground for a distance of 7,100 paces.<sup>99</sup> Elsewhere their channels were carried above ground a total distance of 3,076 and 2,300 paces respectively.<sup>100</sup> The highest arches of the Claudia-Anio Novus rose, however, to a point considerably higher than that of the highest extant portions of the Marcia's arches.<sup>101</sup>

Now the Claudia and the Anio Novus were begun in 38 A.D. by Caligula and dedicated, according to the inscription over Porta Maggiore, in 52 A.D. by Claudius.<sup>102</sup> Or, according to Furneaux's interpretation of a passage in the *Annals* of Tacitus, the Claudia was dedicated in 47 A.D.<sup>103</sup> Thus, the minimal time required for the Claudia's construction was nine years, though quite possibly the inscription is correct and fourteen years were needed. Even if the minimal possible period is discounted somewhat on the ground that construction was interrupted for a time by the change of regime, though this seems unlikely since the work was done under contract, there was still a five year period between the possible completion of the Claudia in 47 A.D. and the dedication of the Anio Novus in 52 A.D.

It is not, unfortunately, absolutely certain how much time was required by Marcius to build the aqueduct that bore his name. The appointment of an official whose term of office lasted only one year to the task assigned Marcius indicates that the senate considered it possible to finish the job in one year. That any one could have imagined that an aqueduct of the length of the Marcia, the longest of Rome's conduits, could be built entirely new in one year, is utterly incredible. In fact, the language of the senate's decree does not seem to indicate that the senators expected Marcius to build a new aqueduct at all. The chief task assigned Marcius, as is clear from the language of Frontinus, was to repair the two older aqueducts. When Marcius' task was not completed in 144 B.C., his authority was unprecedentedly prorogued through the following year. Frontinus says nothing of any other extension.<sup>104</sup> And Pliny even says that Marcius restored the Appia and the Anio and built a third aqueduct in his praetorship.<sup>105</sup> But he might well have regarded the prorogation as part of his praetorship. Besides, new censors took office in 142 B.C. to whose jurisdiction the construction and repair of aqueducts properly belonged.<sup>106</sup>

<sup>97</sup> *Id.* 1,7.

<sup>98</sup> *Ibid.*

<sup>99</sup> *Id.* 1,14,15.

<sup>100</sup> *Ibid.*

<sup>101</sup> *Id.* 1,15,20. The maximal height (109 Roman feet = 32.22 m.) of the Claudia-Anio Novus tops the height (27.41 m., Ashby, *op. cit.*, p. 230) of its extant arches standing north of the Cassino-Naples railway line by almost 5 meters. Delbrück (*op. cit.*, pl. 1) gives the height of the remains of the Marcia at Porta Furba as ca. 13 m. The maximal height of the remains of the Marcia at Ponte Lupo is given as 29.60 m. by Miss Van Deman (*op. cit.*, pp. 95-96).

<sup>102</sup> *CIL* 6,1256.

<sup>103</sup> Tacitus says (*Annales* 11,13) that in 47 A.D. Claudius *fontisque aquarum Simbruinis collibus deductos urbi intulit*. Furneaux in his edition of the *Annals* (2,2 p. 193, *ad. loc.*) interprets these words to mean that in 47 A.D. the Claudia was brought to Rome, a view that Ashby believes accords with the constructional features of the Claudia and the Anio Novus (*op. cit.*, pp. 191-192).

<sup>104</sup> 1,7.

<sup>105</sup> *NH* 31,41; 36,121. Pliny erroneously adds that Marcius also restored the Tepula, though it was not built at that time.

<sup>106</sup> *Fasti Cap.*, *CIL* 1,2, p. 26; Cram, *op. cit.*, pp. 95-96.



Since it is absolutely certain that Marcius gave his name to the third aqueduct and since it is equally certain that his authority did not extend beyond 143 B.C., the conclusion must be that Marcius finished his new aqueduct in that year. If he had not finished it and someone else had supervised its completion, then that person would have got the credit for its construction, as Fulvius did for completing the Anio Vetus,<sup>107</sup> and his name, *not* that of Marcius, would have become associated with the aqueduct, since the source of the Marcia was not a familiar stream like the Anio. If, moreover, it is argued that Marcius simply let the contracts and left the acceptance of the completed work to someone else, why then should it have been necessary to grant him his extraordinary renewal of imperium in 143 B.C.?

Some doubt seems to be cast, however, on the conclusion that Marcius completed this aqueduct in two years by the fact that its water was not brought to the Capitoline until 140 B.C., although the first attempt to block the proposed extension of the Marcia was defeated in 143 B.C.<sup>108</sup> But, if it is inferred from this fact that the Marcia was not completed until that year, several thorny problems arise which are much more difficult to explain than the lapse of three years between the first and second attempt to prevent the extension.

First, why does Frontinus limit Marcius' authority to two years and Pliny to one? Secondly, who was responsible for construction between 143 and 140 B.C.? And, thirdly, why, if it was some one other than Marcius, does his name nowhere appear?

It is clear from the exceptional character of the circumstances connected with the construction of the Marcia that considerable bitterness of a partisan nature was engendered in 143 B.C.<sup>109</sup> The fact that the decemvirs discovered the ban against the Marcia in the Sibylline books while consulting them *for other reasons* stamps this whole manoeuvre as typical Roman political obstruction. One of the censors of 142 B.C., P. Cornelius Scipio Aemilianus, was the leader of the Cornelian faction which at that time was in opposition to the political group to which Marcius Rex and Aemilius Porcina belonged.<sup>110</sup> In 140 B.C., when the second attempt was made to keep the Marcia from the Capitoline, the mover of the motion, L. Lentulus, was a Cornelius.<sup>111</sup> And one of the consuls of that year was C. Laelius, a leading representative of the Cornelian faction.<sup>112</sup> It is, therefore, much more probable that the delay from 143 to 140 B.C. in bringing the Marcia to the Capitoline was the result of political obstruction by the opponents of Marcius and Aemilius Porcina. It may be pure coincidence, but in 140 B.C., when the Marcia's water finally reached the Capitoline, Scipio had resigned the censorship and was already on, or about to begin, his long trip through the East.<sup>113</sup>

<sup>107</sup> Frontinus 1,6.

<sup>108</sup> This is Lanciani's conclusion ("*Le Acque e gli Acquedotti*," p. 59).

<sup>109</sup> See Mommsen's comment on the prorogation of Marcius' imperium (*Staatsrecht* 1,63,71) and Münzer's analysis of the political situation in 143 B.C. and its aftermath (*op. cit.* 238-245).

<sup>110</sup> *Fasti Cap.*, CIL.1<sup>2</sup>, p. 26; Cram, *loc. cit.*; Münzer, *op. cit.*, pp. 225, 237-252; Bilz, *Die Politik P. Cornelius Scipio Aemilianus* (*Würzburger Studien zur Altertumswissenschaft* 7,1935), pp. 40-41. Cicero (*Brutus* 97) reveals that in 137 B.C. Porcina and Scipio came into conflict over the *lex tabellaria* of L. Cassius.

<sup>111</sup> Münzer, *RE*.4,1368, col. 191.

<sup>112</sup> The friendship of Laelius and Scipio was as famous as that of the elder Laelius and the elder Scipio (Münzer, *RE*.12, cols. 404-410 and *op. cit.*, cols. 241, 248-249; Bilz, *op. cit.*, pp. 47-48).

<sup>113</sup> For the date of this much discussed trip see Münzer, *Klio* 5,1905, pp. 135-136 and *RE*.4, col. 1452; Uehling, *Untersuchungen zur Geschichte der orientalischen Politik Roms in d. Jahren 146-88 v. Chr.*,



The evidence indicates, therefore, that the water of the Marcia was brought to its terminal castellum in 143 B.C., but that the opponents of Marcius and Porcina were able during Scipio's term as censor in 142-141 B.C. to render ineffective the permission won in 143 B.C. to extend its conduit to the Capitoline. After Scipio laid down his office, the work of extension could then proceed to its completion in 140 B.C.

But two years could not possibly have been sufficient to survey and build an aqueduct of the Marcia's length and type as a totally new structure. Yet two years, or less, is the period recorded by Frontinus and Pliny. It seems all but certain, therefore, that Marcius was able to build his long aqueduct in two years only because he utilized an uncompleted structure available in 144 B.C. The only such uncompleted aqueduct of which there is any record is the aqueduct begun in 179 B.C. by Aemilius and Fulvius. Marcius, the writer believes, used the senate's decree as his authorization for completing the work begun by Aemilius and Fulvius. The Aqua Marcia was, then, in reality the completion of the Aqua Aemilia-Fulvia which Crassus had blocked in 179 B.C.

An exact parallel to the completion in 143 B.C. of the aqueduct begun in 179 B.C. is offered by the history of the often discussed *pilas pontis in Tiberi*<sup>114</sup> which M. Fulvius Nobilior—and in all probability M. Aemilius Lepidus<sup>115</sup>—built in 179 B.C. These stone piers were either left in the river without any connecting superstructure or, more probably, were joined by a wooden one. In 142 B.C. P. Cornelius Scipio Aemilianus and L. Mummius, the censors of that year, completed the bridge in stone by adding arches and superstructure.<sup>116</sup> The explanation of the unusual activity in building expensive public structures in 144-142 B.C. is undoubtedly to be connected with the booty obtained at Carthage and Corinth in 146 B.C. In earlier times the Anio Vetus had been built from the booty won in the war with Pyrrhus.<sup>117</sup>

The defense of the Marcia by M. Aemilius Lepidus Porcina in 143 B.C. against the decemviral attack was motivated, therefore, by more than loyalty to a political ally—Porcina was also fighting for the completion of a work begun by his grandfather,<sup>118</sup> or father,<sup>119</sup> for a monument, in other words, associated with the Aemilii Lepidi. An Aemilius Lepidus would, therefore, have good reason to represent on a coin struck by himself in 90-89 B.C. this aqueduct which Pliny describes as *inter reliqua deum munera urbi tributa*.<sup>120</sup> At that time the name Aqua Marcia, by which the aqueduct was later known, had not yet displaced the earlier name which Pliny tells us the conduit bore. It is, at any rate, hardly likely that M. Aemilius Lepidus would have given such wide circulation to a monument he knew in advance would not be associated by the users of his coins with the Aemilii Lepidi.

Pliny, it is true, says that the earlier name of the Marcia was the Aqua Aufeia. But, as the writer has pointed out elsewhere,<sup>121</sup> Aufeia, which is an uncommon name at best, occurs nowhere else in Latin literature as the modifier of *aqua*.<sup>122</sup> There is,

Diss. Jena, 1914, pp. 26-31 Winkler, *Rom und Aegypten im 2. Jahrhundert v. Chr.*, Diss. Leipzig, 1933, pp. 66-68; and Bilz, *op. cit.*, pp. 44-47.

<sup>114</sup> Livy 40.51.4.

<sup>115</sup> Platner-Ashby, p. 397.

<sup>116</sup> Livy, *ibid.*

<sup>117</sup> Frontinus 1.6.

<sup>118</sup> Münzer, *op. cit.*, p. 240.

<sup>119</sup> Colin, *Rome et la Grèce (Bibliothèque d. l'Écoles Franc. d'Athènes et de Rome 94)*, p. 509, note 2.

<sup>120</sup> NH. 31.41.

<sup>121</sup> In a paper published in the *AJP*. lxiv, 1943, pp. 440-444. lxiv

<sup>122</sup> *Thesaurus Linguae Latinae* s.v. Aufeia.



moreover, absolutely no evidence that could connect an Aufeius with the Marcia. The writer has suggested, therefore, Aemilia-Fulvia as an emendation of Aufeia and explained the corruption to Aufeia as the original error of Pliny or, as seems more likely, the misunderstanding of an abbreviation for Aemilia-Fulvia in Pliny's copy for the published version of his *Natural History*.<sup>123</sup>

The only part of an uncompleted aqueduct that could call itself sufficiently to public attention to require a name would be its terminal arches. During the thirty odd years in which the arches of Aemilius and Fulvius stood dry and useless in the Campagna before Marcius put them into service, reference to them must have taken the form of *fornices Aemilii-Fulvii* or *opus Aemilium-Fulvium*. It would have been strange indeed if their long familiar designation as Aemilio-Fulvian had not continued in everyday parlance long after 143 B.C. Siam is still more familiar to most of us than Thailand, in spite of newspapers, radio, and the news reels.

### III

Two further details of the representation on the denarius of M'. Aemilius Lepidus require explanation: 1) the representation of only three arches of the aqueduct; and 2) the identity of the statue surmounting these three arches.

The invariable number of arches represented on Aemilius' coin (pl. VIII) suggests that a particular, well known portion of the aqueduct was reproduced by his die-cutters. On the denarius of Marcius Philippus, where the aqueduct as a whole rather than a particular part is represented, the number of arches varies.<sup>124</sup> The portions of the aqueduct which crossed roads leading into the city would be those most likely to be singled out for reproduction as familiar to users of Aemilius' coin. The Marcia approaches Rome from the southeast. Its final section prior to reaching the later Aurelian wall ran parallel and to the east of the Via Labicana.<sup>125</sup> Just before reaching the point at which the Via Labicana joins the Via Praenestina outside Porta Maggiore, the Marcia crossed the latter at right angles. Once across Via Praenestina the Marcia turned northwest again, running closely parallel to the road so far as the Aurelian wall.<sup>126</sup> There the aqueduct angled sharply to the north following a line that crossed Via Tiburtina before ending at its terminal castellum on the Viminal. The

<sup>123</sup> For the Elder Pliny's fixed habit of excerpting something from everything that he read, see the letter of his nephew to Baebius Macer (*Epistulae* 3.5.10). An echo of this name may possibly exist in Canina's reference to the *Sorgente di S. Maria di Arsoli*, one of the putative sources of the Marcia, by its local name at the time of *Fosso dell' Acqua Amelia* (*Edifici* 6, pl. 139; Lanciani, *op. cit.*, p. 64). Fabretti (*De Aquis et Aqueductibus*, 1680, p. 67.15), however, does not seem to know of this name and says merely: *venae uberrimae sub Ecclesia S. Mariae in Arsulis, nobis Fontes Aquae Marciae*.

<sup>124</sup> Grueber 1,485,3890-3895, pl. 48,17-18; cf. Kubitschek, *loc. cit.*, pp. 5-6.

<sup>125</sup> Ashby, *op. cit.*, p. 141; cf. note 2, maps, pl. 1; Lanciani, *Ruins and Excavations*, fig. 19. In the *Forma Urbis* (32) Lanciani incorrectly and tentatively placed the Marcia west of the Via Labicana, the position Lugli still gives it (*op. cit.* 2, pl. 5). P. Grimal (*Mélanges d'archéologie et d'histoire* 53,1936, pl. opposite p. 264) has also followed Lanciani in his earlier placement of the Marcia in the map he reproduces of this region.

<sup>126</sup> The remains of this pier of the Marcia bearing the *specus* of the Marcia, Tepula, and Iulia has often been illustrated: Ashby, *op. cit.*, pl. 7 b; Van Deman, *op. cit.*, p. 117, text cut 11; Lanciani, *Ruins and Excavations*, fig. 23; Lugli, *op. cit.* 2, fig. 72; Platner, *The Topography and Monuments of Ancient Rome*, fig. 10; Bennett, *Frontinus*, pl. opposite p. 361. Grimal, *loc. cit.*, opposite p. 280, publishes a new and unusual view of it.



originals of the arches on the denarius of Aemilius should be sought, therefore, at either Via Praenestina or Via Tiburtina.

The Marcia was carried across Via Tiburtina, however, on a single arch, as the extant arches restored by Augustus show, on a line which deviates only slightly from that of the rest of the arches.<sup>127</sup> A coin representation of the aqueduct at this point should show, therefore, either a single arch or else a series of arches continued to the border. Three arches would be no more significant here than one, or five, or seven.

At the point where the Marcia crossed the Via Praenestina, the aqueduct ran on a line that formed a sharp angle, ca. 30°, with that of the road. It was necessary, therefore, to take the channel across Via Praenestina on a line at a sharp angle to the line of the arches on the west and east side of the road. The short section of arches that crossed Via Praenestina would then appear to the passing traveller as a short series of arches bounded at each end by a perpendicular buttressing wall (see pl. ix). As Lanciani has reconstructed this short section of the aqueduct that crosses Via Praenestina there is space for three arches.<sup>128</sup> It is these three arches that bore the Marcia across Via Praenestina that are reproduced, in the writer's opinion, on the coin of Aemilius. That is why the two end arches of the coin representation terminate in a perpendicular line and do not continue on to the border as do the arches on the coin of Marcius Philippus. Their architectural effect must have been very similar to that made later by the arches of the Claudia-Anio Novus at almost this same point. These arches were, in short, a republican version of the Claudian Porta Maggiore. Aemilius and Fulvius or even Marcius Rex may possibly have anticipated Augustus and Claudius in building the portion of their aqueduct which crossed the Via Tiburtina and the Via Praenestina in more valuable material than the rest of the aqueduct.<sup>129</sup> Here too, in all probability, they inscribed their efforts to improve the city's water supply as others did after them at just these points.<sup>130</sup>

To reinforce the association of the Aemilii with the Aqua Aemilia-Fulvia-Marcia,

<sup>127</sup> *CIL* 6, 1244-1246; Richmond, *The City Wall of Imperial Rome*, pl. 16 a-b, fig. 33; Van Deman, *op. cit.*, pl. 23, fig. 2; Herschel, *op. cit.*, p. 191.

<sup>128</sup> *Forma Urbis* 32. Lanciani's plan, incorrect, as already noted, as to the position of the Marcia in relation to the Via Labicana, is also wrong in the arrangement it provides for the Marcia's crossing of Via Praenestina. A pier is indicated on each side of the road at a distance of 4 to 5 meters from its edges. There is no indication for an intermediate pier in the road itself, which is 7 meters wide. Such a pier (3.25 m. [Delbrück, *op. cit.*, pl. 1]), to judge from the remains of the Marcia at Porta Furba, would, in any case, have all but completely blocked the road. The span of the arch crossing the Praenestina would, then, according to Lanciani's plan, have had the impossible width of 15 to 17 meters. The writer has restored, therefore, the three arches (pl. ix) in such a way as to place a pier at each edge of the road to support the central arch that carried the channel across the road. The central arch is flanked in turn by another arch on each side, as on the coin of Aemilius Lepidus. In the restoration of pl. ix, the Praenestina's width is scaled to the width of 7 m. which Lanciani's plan gives for it. This causes the piers to project into the road on each side. It is, however, more than probable that originally the Praenestina was approximately of the same width as the span of the Marcia's arches at Porta Furba, namely 5.35 meters (Delbrück, *op. cit.*, pl. 1). This conclusion seems to be confirmed by the narrower (6 meters, *Forma Urbis* 32) width of both the Praenestina and the Labicana in the part which runs beneath the Claudian arches of the Porta Maggiore.

<sup>129</sup> Porta Tiburtina: *CIL* 6, 1244; Richmond, *op. cit.*, pp. 170-181, pl. 16 a-b, fig. 33; Mariani, *Bull. Comm.* 45, 1917, pp. 211-212, figs. 10-11, 13; Van Deman, *op. cit.*, pp. 119-120, pl. 23, fig. 2; Ashby, *op. cit.*, p. 145. Porta Praenestina: *CIL* 6, 1256; Richmond, *op. cit.*, pp. 205-217, pls. 20-21, figs. 39-41; Platner-Ashby, 413; Mariani, *loc. cit.*, pp. 205-207, figs. 6-8; Ashby, *op. cit.*, pl. 17.

<sup>130</sup> *CIL* 6, 1244-1246; 1256-1258.



M'. Aemilius Lepidus had his die-cutters place above the arches the representation of a well-known statue in the city of the most distinguished Aemilius of the second century B.C. and, at the same time, one of the original builders of the aqueduct, M. Aemilius Lepidus, the censor of 179 B.C. To facilitate the recognition of the statue the die-cutters were ordered to represent it out of all proportion to the arches on which it rested. The marked difference between the equestrian statue on Manius Aemilius' coin and the equestrian statue that appears above the arches on the coin of Marcius Philippus (figs. 1 and 6), or between either statue and the equestrian statue erected to a fifteen-year-old Aemilius for saving a citizen's life and slaying an enemy, which a later Aemilius Lepidus, perhaps the triumvir,<sup>131</sup> represented on one of his issues, indicates that the equestrian statue above the three arches represented a particular statue and was intended to be recognized. The dative case in which the name of Manius Aemilius Lepidus appears on his coin is unique<sup>132</sup> among moneyer's names. Mommsen<sup>133</sup> explained this dative as a transference to the statue represented on the coin of the dedicatory formula of the statue it reproduced. The arrangement of the moneyer's name on the coin seems to confirm this (pl. VIII). The lettering of the word AEMILIO surrounds the statue and the abbreviation of Lepidus, LEP, appears between the arches. The connection between the person represented by the statue and the aqueduct is thus further emphasized by the legend. But the abbreviation of the *praenomen* of the moneyer, Manius, which differed slightly from that of the censor Marcus, has been placed in the most inconspicuous relation possible to either the statue or the aqueduct.

When Marcius Philippus issued his representation of the aqueduct in ca. 56 B.C. he also placed a disproportionately large statue of his ancestor, Q. Marcius Rex, above the aqueduct which he had brought to successful conclusion.<sup>134</sup> In the case of this statue, we know from a military diploma<sup>135</sup> that it stood on the Capitoline behind the temple of Iuppiter Optimus Maximus. The intent of Marcius Philippus in transferring it from the Capitoline to the aqueduct Q. Marcius Rex had completed was the same as that of M'. Aemilius. He also meant to identify his ancestor with the great aqueduct which he had brought to a brilliant conclusion. To end the Aemilian claim to its authorship once and for all, he had his die-cutters insert the proud AQUA MAR. The measure of his success may be gauged by the universal silence in modern accounts of the Marcia concerning the Aemilii.<sup>136</sup> But even Marcius was ultimately forgotten. It is Marcus Agrippa, the restorer of the Marcia in 33 B.C.,<sup>137</sup> to whom Polemnius Silvius, in the fifth century A.D., credits its construction.<sup>138</sup>

HUNTER COLLEGE

MERIWETHER STUART

<sup>131</sup> Grueber 1,447-449;3638-3647, pl. 46,2-8.

<sup>132</sup> Grueber 1,lxxiv.

<sup>133</sup> *Histoire de la Monnaie Romaine* 2,345-346.155, note 4.

<sup>134</sup> Mommsen, *op. cit.*, 2, p. 513, note 4; Kubitschek, *loc. cit.*, p. 5. Münzer (*RE*.14, col. 1583,90) suggests that the statue may be that of another ancestor of Marcius Philippus, Q. Marcius Tremulus. But on a coin so devoted to the Aqua Marcia as the denarius of Philippus this seems most unlikely.

<sup>135</sup> *CIL*.3, p. 846.

<sup>136</sup> The best known example of the obliterating influence of an inscription upon the history of a structure is Hadrian's restoration of M. AGRIPPA L. F. COS. TERTIUM FECIT across the entablature of the Pantheon's porch (*CIL*.6,896 = Dessau 129; for the most recent studies see H. Bloch, *I bolli laterizi e la storia edilizia romana* (*BullComm*.65,1937, pp. 98-113); and J. Guey, *Mélanges d'archéologie et d'histoire* 53,1936, pp. 198-249). The Pantheon's inscription helped to obscure its later history, that of Philippus' denarius the pre-Marcian character of the Marcia.

<sup>137</sup> Frontinus 1,9; Dio (49,42,2) dates this restoration in 34 B.C.; Pliny, *NH*.31,41.

<sup>138</sup> *Martia inventa est a Marco Agrippa* (Mommsen, *Chronica Minora* 1, p. 546).



# NEOLITHIC ANCESTORS OF THE GREEKS

## PLATE X

REMAINS of only thirteen individuals of Neolithic date have been excavated so far in Greece, including eight male skulls or skeletons, two male (?) skull fragments, one female, and two child skulls. These come from the following sources: Servia in south Macedonia,<sup>1</sup> Tsangli in central Thessaly,<sup>2</sup> Astakos in southwest Acarnania,<sup>3</sup> Choirospilia in south Leukas,<sup>4</sup> the Athenian Agora,<sup>5</sup> Hageorgitika in east Arcadia,<sup>6</sup> and a fragment from Nemea in the northwest corner of Argolis.<sup>7</sup> All except four of these have been published in English and need only summary description here. I was able to study three of the four, from Astakos and from Hageorgitika, in the Athens Anthropological Museum,<sup>8</sup> and they will form the new material of this paper. The fourth skull, from Leukas, I have not been able to study yet except from Velde's front and profile photographs.

Measuring technique is that used in the Peabody Museum laboratory of Physical Anthropology under Dr. E. A. Hooton, generally following Martin's definitions except for facial angles.<sup>9</sup> Skulls will be described in terms of a set of arbitrary morphological types outlined in earlier publications<sup>10</sup> to serve as artificial compromises between the stereotyped "average ancient Greek" and the genetically determined peculiarities of all the individuals studied. The norm in all cranial description is the modern northwest European (or American).

1 Ser is a gracile young adult male skeleton<sup>11</sup> from an early Neolithic B contracted

<sup>1</sup> I. Κουμάρης, "Ὀστεομετρικαὶ Ἑκθέσεις: Β. Σκελετὸς ἐκ Μακεδονίας (ἐκ Σερβίων)," Ἑλληνικὴ Ἀνθρωπολογικὴ Ἑταιρεία, Πρακτικά xi, 1934, pp. 4-6; W. A. Heurtley, *Prehistoric Macedonia*, Cambridge, 1939, pp. 256-257, p. 54; J. L. Angel, "Classical Olynthians," Appendix in D. M. Robinson, *Excavations at Olynthus*, Part XI, *Necrolynthia*, Baltimore, Johns Hopkins Press, 1942, pp. 215-216.

<sup>2</sup> W. L. H. Duckworth, "Report on a Human Skull from Thessaly," *Man* xi, 1911, pp. 49-50; A. J. B. Wace and M. S. Thompson, *Prehistoric Thessaly*, Cambridge, 1912, p. 121.

<sup>3</sup> S. Benton, "The Ionian Islands," *BSA* xxxii, 1931-32, pp. 213-246; I. Κουμάρης, "Σημείωμα ἀνθρωπολογικῶν Παρατηρήσεων," Ἑλλ. Ἀνθρ. Ἑτ., Πρακτικά xii, 1935, pp. 26-27.

<sup>4</sup> G. Velde, "Anthropologische Untersuchungen und Grabung in einer Höhle der jüngeren Steinzeit auf Leukas," *Zeitschr. für Ethnol.* xlv, 1912, pp. 845-865.

<sup>5</sup> T. L. Shear, "The Campaign of 1935," *Hesperia* v, 1936, pp. 20-21; "The Campaign of 1937," *Hesperia* vii, 1938, p. 336; "The Campaign of 1938," *Hesperia* viii, 1939, p. 298; J. L. Angel, "Skeletal Material from Attica," *Hesperia* xiv, no. 4, 1945.

<sup>6</sup> C. M. Fürst, "Über einen neolithischen Schädel aus Arkadien," *Lunds Universitets Årsskrift, N.F.*, and 2, xxviii, No. 13, 1932.

<sup>7</sup> C. M. Fürst, *op. cit.*

<sup>8</sup> My field work in Greece was made possible by travelling fellowships from the departments of Anthropology and of Classics of Harvard University. I am deeply indebted to Dr. E. A. Hooton, Dr. G. H. Chase, and Dr. C. N. Jackson for this and other encouragement. The specific new material for this report was made available to me through the kindness of Dr. John Koumaris, Dr. T. L. Shear, Dr. C. W. Blegen, and Dr. S. Benton, to whom I am most grateful, as well as to the many archaeologists and anthropologists who have given me vitally diverse help.

<sup>9</sup> Terms and definitions are listed in J. L. Angel, *op. cit.*, and in "A Racial Analysis of the Ancient Greeks: an Essay on the Use of Morphological Types," *Am. Journ. of Phys. Anthropol.*, N.S. ii, 1944, table 2a.

<sup>10</sup> J. L. Angel, *op. cit.*

<sup>11</sup> Main skeletal measurements not published previously follow. Right and left lengths, head diameters, and maximum and minimum shaft diameters of humerus: 272, 266, 38, 38, 20, 19, 15, 14. Right and left radius, ulna, and clavicle lengths: (219), 214, 235, 231, 126, 131. Right and left bicondylar and



burial in a mound near Servia in the Haliacmon valley, south Macedonia. The slender and short skeleton has relatively short upper arms, clearly male pelvis, slightly platymeric femora with incipient third trochanters, eurycnemic and scalene-sectioned (Type II) tibiae with retroverted heads, and total suggestion of contrast with the typical ancient Greek stocky body build. The relatively smooth, sphenoid, virtually brachycranic skull vault is relatively high with short and pinched skull base, constricted and steep forehead, full parietals, and short occiput. Although the nose is short and broad, the rest of the face contrasts with the braincase in being notably linear with compressed cheekbones and a long, deep, narrow and protrusive set of jaws. Gracility and smallness, compressed midfacial region, and broad nose all prevent the Servia skull from repeating exactly the Dinaric-Mediterranean type with which most of its characters group it.<sup>12</sup>

1 Ts is the broken cranium of a young adult male excavated by Wace and Thompson from a cist grave presumed to be Neolithic in the Tsangli mound in central Thessaly. The long ovoid vault has strong brow ridges, a sweeping profile curve, deep lower occiput, and the apparently high face is marked by a salient hawklike nose. Except for too great parietal fullness and too short occiput (deviations in a Dinaric-Mediterranean direction), the Tsangli skull exemplifies well the "Iranian" tendency in the Nordic-Iranian type in Greece.<sup>13</sup>

1 Ast is the calvaria of a young adult male (with uncertain sex criteria) excavated by Benton from a Neolithic B cave site above the chapel of H. Nikolaos on the Acarnanian coast west of Astakos. As seen in the upper row of Plate X, the small mesocranic vault is pentagonoid in top view, with well-developed frontal and parietal bosses. The profile shows average brow ridges below a notably low forehead behind which the frontal rises to parietals which are flattened postcoronally and again at lambda just above the well-curved occiput. The temporal bone shows medium size mastoid and supramastoid crest, steep-sloping articular eminence, and oval auditory meatus. In addition to a medium-sized ridge occipital torus, flattening of the sidewalls and a definite pinching in of the skull base are clear in rear view: restricted resemblance to the Servia skull. The frontal bone suggests that the nasal root was broad and orbits horizontal rather than tilted. The skull's coincidence with the angular subgroup of the Mediterranean type is reasonably exact,<sup>14</sup> since its slight size reduction and lowness of vault are negligible in degree.

maximum lengths, head diameters, and antero-posterior and lateral shaft diameters at sub-trochanteric and mid-shaft levels of the femur: 386, 386, 390, 390, 42, 41, 22, 22, 28, 28, 21, 22, 24, 25. Right and left diagonal lengths and a.-p. and lateral nutrient foramen level shaft diameters of the tibia: 321, (320), 28, 28, 20, 21. Lengths and breadths of right and left calcanei: 72, 72, 39, 40. Left talar sulcus-head length, transverse breadth, and projective height: 49, 38, 27. Right innominate height and breadth: 187, 144. Sacral height and breadth: 93, 102. Anterior and posterior combined heights of lumbar vertebrae centra: 126, 121.

<sup>12</sup> Compare *Necrolynthia*, pl. LXX with *AJPA*. N.S. ii, p. 340, fig. 8.

<sup>13</sup> Compare *Man* xi, pp. 49-50, figs. 1 and 2, with *AJPA*. N.S. ii, p. 340, fig. 7, and with H. V. Vallois, "Les ossements humains de Sialk," in R. Girsman, *Fouilles de Sialk 1933, 1934, 1937*, ii, Paris, 1939, pp. 113-192, and W. M. Krogman, "Racial types from Tepe Hissar, Iran, from the Late Fifth to Early Second Millennium B.C.," *Verh. d. Koninkl. Nederland. Akad. van Wetensch., Afd. Nat., Tweede Sect.* xxxix, No. 2, Amsterdam, 1940.

<sup>14</sup> Compare Plate X with *AJPA*. N.S. ii, p. 339, fig. 6.



2 Ast, from the same site, is the calvaria of a middle-aged adult male, almost as small as 1 Ast, and a narrow ovoid, almost ellipsoid, in form. It is marked by a low forehead almost without slope, smoothly curved parietals with medium lambdoid flattening, markedly curved and deep occiput, and projecting skull base. The temporal planes show only slight fullness. And the temporal bones combine a pointed mastoid process, elliptical auditory meatus, deep glenoid fossa, strong supramastoid crest, and sharply prominent though slender zygomatic process clearly enough to resemble an isolated temporal bone from the Athenian Agora.<sup>15</sup> The appearance and mutual relationships of the temporal bones with their flaring zygomatic processes and the frontal bone suggest a relatively wide face. As seen in the second row of Plate X, this suggestion of face broadening contrasts with the general narrowness of the skull and is the only divergence from the linear extreme of the Mediterranean type.

Various skeletal fragments were recovered from the Astakos cave. Two broken left tibiae, perhaps male (?), have diamond-shape (Type IV) shaft cross sections, and their a.-p. and lateral nutrient foramen level diameters are 34 and 25, 38 and 24, with cnemic indices of 73.53 and 63.16 respectively. A right calcaneus, plausibly male, is 77 mm. long and 43 wide. The tuberosity shows a low placed rugosity for the Achilles tendon and a medium slope lateralward. The facets on the sustentaculum tali are fused. A left femur, probably female, has well-developed gluteus maximus insertion markings and subtrochanteric and midshaft a.-p. and lateral diameters of 19 and 25, 22 and 22, with a platymeric index of 76.00. A female left tibia with antero-lateral concave (Type III) section and definite "squatting facets" has nutrient foramen level a.-p. and lateral diameters of 22 and 19, cnemic index of 65.52, and possible length of only (260). A female right innominate repeats the impression of small size which is the only remarkable characteristic of any of these postcranial bones.

1 Le is a possibly male middle aged (or old?) cranium excavated by Velde from a Neolithic cave burial at Choirospilia in south Leukas. Like the early bronze age human remains excavated by Dörpfeld on Leukas this skull is published only photographically, with no other data except interorbital breadth (20 mm.), vault thickness (5 mm.), and cranial index (81: brachycrane). The vault appears relatively low and not especially short. In profile a high and bulging forehead surmounts flat brow ridges and the upper frontal leads back to parietals with a long postcoronal to vertex flattening. The skull base is narrow in contrast to the parietal bulge above it. The face is low and broad, with horizontal elliptical orbits enclosed by slender but flaring cheekbones, an apparently broad nose with short concave nasal bones, and a broad and notably shallow jaw with slightly flaring jowls, unimpressive chin, and relatively broad and short ramus. The mouth region is wide with only incipient protrusion. Although Velde's cranial index, together with many of the facial features, place this skull in the paedomorphic extreme of the Alpine group,<sup>16</sup> the Choirospilia skull shows enough Mediterranean details to link it with 1 Ast, with Mixed Alpine Neolithic

<sup>15</sup> *Hesperia* xiv, no. 4.

<sup>16</sup> Compare *ZfE.* xlv, pp. 845-865 with *AJPA.* N.S. ii, p. 341, fig. 10. Velde gives no vertex photograph which would check his cranial index.



skulls from the Athenian Agora (1 AA and 31 AA), and even with an unpublished child's skull from Troy I and an adult from Kum Tepe.<sup>17</sup>

27 AA is a young adult male skeleton recovered by the excavators at the Athenian Agora, led by Dr. T. L. Shear, from a shaft grave east of the Metroon in Section E. The skeleton shows a relatively tall and slender build with flattening of long bone shafts, "squatting facets," and sharply marked gluteus maximus insertions as usual in Greece. The skull form is ovoid (-byrsoid) in top view, with well developed brow ridges and sloping forehead, slight postcoronal depression, and vault rising to vertex far back before descending to a flattened lambda region. The skull base tends to protrude, and the large and hexagonal face has low and slightly tilted orbits, mesorhine nose, and crude, deep-jawed lower face. The traits in which 27 AA diverges from its Dinaric-Mediterranean classification,<sup>18</sup> extra cranial elongation and facial breadth and robusticity, tend toward the Basic White-type.

31 AA, a young adult female rhomboid brachycrane well-filled calva of dominantly Mixed Alpine type, 32 AA, a young adult male small mesocrane ovoid calva with sharply cut brow ridges, of Mediterranean type, and 33 AA, an immature pentagonoid calva of Mediterranean appearance all come from Well 18 in Section OA. And 1 AA, the calvarium of a seven year old child from Well 5 in section OA, has a broad rhomboid skull vault with steep and narrow forehead and a relatively low face with rhomboid orbits, and is grouped as a Mixed Alpine, though showing Mediterranean traits. A right temporal from the same well is similar to those of 2 Ast as noted above.

1 Hag is the cranium of a young adult male (see Plate X, lower two rows), excavated by Blegen from a secondary burial in a Neolithic oval cist grave on the southeast slope of the hill where the Neolithic village near Hageorgitika was uncovered in east Arcadia.<sup>19</sup> The long and narrow skull vault is strikingly high and angular, with relatively wide forehead. It is pentagonoid in both top and rear views, with flat sides and a roof-shaped vault whose highest point in profile is placed far back. The profile shows a series of flat planes with rounded angulations at the frontal bosses, vertex, opisthocranion, and high temporal lines bounding an extensive temporal muscle origin area. The skull base tends to protrude, the supramastoid crests are strong, and the long mastoids have tympanic bones forming elliptical meati plastered against them. The robust face is broad relative to the linear vault, and is marked by oblong level orbits and linear nose in a short upper face as contrasted with deep lower face<sup>20</sup> with strong-chinned, obtuse-angled, long and linear jaw which adds force to a hint of prognathism. The parabolic palate is broad and low, with a "lump" palatine torus posteriorly. Eight teeth were lost before death, linked with abscess formation, and extreme wear marks the remaining teeth in active use. Thus the estimated age of 30-35 is based on suture closure. Linearity of the high vault, of the nose,

<sup>17</sup> S. A. Kansu, "Étude anthropologique sur les ossements de Kumtepe," *Türk Tarih Kurumu, Belleten* i, 1937, pp. 570-590.

<sup>18</sup> Compare *Hesperia* xiv, no. 4, pl. II, cat. no. 2 with *AJPA*. N.S. ii, p. 340, fig. 8.

<sup>19</sup> Fürst in *LUA. NF.*, *avd.* 2, xxviii, No. 13, mentions bones of several people in the grave. Platymetric indices of femora: 66 and 68, 72 and 70, for right and left respectively. Cnemic indices 61.8 and 63.3.

<sup>20</sup> 4 mm. are added to the measured face height of 110 to allow for the extreme degree of incisor teeth wear. See table I.



and of the jaw make the Hageorgitika male a good example of the "Megalithic" trend within the Basic White type,<sup>21</sup> rather than of the central trend of this type. And for the dynamics of racial development during the first population planting in Greece the subtleties of 1 Hag's resemblances to 27 AA in vault profile and facial robusticity are as important as the general similarity of Basic White and Mediterranean types which together group themselves as contrasting components in the "Mediterranean race" of Sergi.<sup>22</sup>

1 Ne, from a Neolithic cave site near Nemea, is a relatively thick fragment,<sup>23</sup> including the upper occipital squama and upper rear thirds of the parietals. With slight indications of a sagittal gable and angulation at parietal bosses it might have belonged to a more massive and rounded version of the Hageorgitika skull, though of course it is impossible to tell whether the Nemea skull was actually long or short.

A Neolithic skull excavated by Blegen from a cave burial on the East Yerogalario ridge near the Heraeum in Argos appears from the illustration<sup>24</sup> to be long headed.

The right hand column of Table I gives the uncertain averages derivable from the small sample of Neolithic males so far uncovered in Greece. Any observations resulting from comparison with the average ancient Greek<sup>25</sup> or with exotic groups are predictions to be checked in the future rather than conclusions. On this basis the average Neolithic inhabitant of Greece seems to have had a smaller skull vault, relatively narrower and higher and slightly more angular than that of the average ancient Greek, with relatively longer, more constricted, and more protruding skull base, more pointed mastoids, and more sharply flaring zygomatic processes. Possibly the Neolithic face was larger in proportion to the skull vault, slightly more linear and more incipiently prognathous, with lower and more horizontal orbits, coarser cheekbones and nose, and longer, deeper, and leaner jaw. All differences are surprisingly minor in degree: the Neolithic population must have been largely ancestral to the later Greeks. This tentative comparison, plus consideration of individual skulls, shows the Neolithic pre-Greeks more Mediterranean than the Greeks, with emphasis on intermediate or gracile Mediterranean rather more than on the rugged Basic White trend, and with a Dinaric-Mediterranean more than Alpine minor tendency. In fact, it is just this tendency which prevents the group from being the typical Aegean low-faced Mediterranean blend supposed to occupy Crete at this time and later in the third millennium B.C.<sup>26</sup> And in any case the contrasts between individual

<sup>21</sup> Cf. C. S. Coon, *The Races of Europe*, New York, Macmillan, 1939, p. 85 (3), vs. *AJPA*. N.S. ii, p. 339, fig. 5. Fürst's (*LUA*. N.F., avd. 2, xxviii, no. 13) description of 1 Hag as a "Nordic female (?)" must be interpreted with reference to his work with Swedish Neolithic skulls, which frequently show that combination of features which are "Megalithic" in Coon's sense, as well as "Corded" Nordic forms.

<sup>22</sup> G. Sergi, *The Mediterranean Race: a Study of the Origin of European Peoples*, London and New York, 1901.

<sup>23</sup> C. M. Fürst, *op. cit.*

<sup>24</sup> C. W. Blegen, *Prosymna*, Cambridge, University Press, 1937, i, pp. 22-29; ii, p. 4, fig. 29.

<sup>25</sup> *AJPA*. N.S. ii, pp. 337-338, fig. 3.

<sup>26</sup> W. B. Dawkins, "Skulls from Cave Burials at Zakro," *BSA*. vii, 1900-01, pp. 150-155; W. L. H. Duckworth, "Excavations at Palaikastro II. Human remains from Hagios Nikolaos," *BSA*. ix, 1902-03, pp. 344-355; and "Archaeological and Ethnological Researches in Crete," *Brit. Assn. for Adv. of Sci., Report of 82nd Meeting at Dundee*, London, 1913, pp. 224-268, Table vi; S. Xanthoudides, *Vaulted*



TABLE I

INDIVIDUAL AND MEAN MEASUREMENTS AND INDICES OF MALE SKULLS FROM GREEK MAINLAND NEOLITHIC

| Skull number         | 1 Ser     | 1 Ts            | 1 Ast            | 2 Ast   | 27 AA          | 32 AA   | 1 Hag         | Total  |
|----------------------|-----------|-----------------|------------------|---------|----------------|---------|---------------|--------|
| Site                 | Servia    | Tsangli         | Astaka           |         | Athenian Agora |         | Hageorgitika  |        |
| Region               | Macedonia | Thessaly        | Acarnanian coast |         | Attica         |         | S. E. Arcadia |        |
| Excavation           | Heurtley  | Wace & Thompson | S. Benton        |         | T. L. Shear    |         | C. W. Blegen  |        |
|                      | 1933      | 1910            | 1931 ?           |         | 1935           | 1939    | 1928          |        |
| Horiz. circumference | 494       | 530             | 493              | 497     | 516 ??         |         | 516           | 507.67 |
| Sagittal arc         | 367       | (375)           | (358)            | 367     | 384 ?          |         | 389           | 376.75 |
| Frontal arc          | (122)     | 130             | (117)            | (126)   | 126            |         | 134           | 130.00 |
| Parietal arc         | (130)     | 130             | (124)            | (127)   | 135            |         | 131           | 132.00 |
| Occipital arc        | (115)     | (115)           | (117)            | (114)   | 123 ??         |         | 124           | 123.50 |
| Transverse arc       | 303       | 305             | (290)            | 287     | 312            |         | 301           | 301.60 |
| Cranial length       | 174       | 186             | 178              | 178     | 189 ??         | 174     | 192           | 181.57 |
| Cranial breadth      | 139       | 143             | 134              | 129     | 143            | 134 ?   | 128           | 135.71 |
| Basion-bregma ht.    | 132       | (137)           | (119)            | 127     | 138            |         | 140           | 134.25 |
| Auricular height     | 115       | 117             | 109 ?            | 108     | 120            |         | 122           | 115.17 |
| Minimum frontal br.  | 90        | 96              | 92               | 90 ?    | 98             | (96)    | 97            | 93.83  |
| Maximum frontal br.  | 113       | (122)           | (109)            | (110)   | (115)          |         | 105           | 109.00 |
| Frontal chord        | (108)     | (116)           | (104)            | (109)   | 111            |         | 116           | 113.50 |
| Parietal chord       | (117)     | (115)           | (113)            | (115)   | 118            |         | 115           | 116.50 |
| Occipital chord      | (94)      | (100)           | (97)             | (94)    | 101            |         | 101           | 101.00 |
| Basion-nasion lgth.  | 92        |                 |                  | (92)    | 102            |         | 107           | 100.33 |
| Basion-prosthion     | 96        |                 |                  |         | 102            |         | 101           | 99.66  |
| Frontal angle        | 53        | (46)            |                  |         | 55             |         | 52            | 53.33  |
| Facial angle         | 79        |                 |                  |         | 85             |         | 89            | 84.33  |
| Midfacial angle      | 83        |                 |                  |         | 91             |         | 92            | 88.33  |
| Alveolar angle       | 65        |                 |                  |         | 70             |         | 74            | 69.66  |
| Nasalia angle        | 65 ?      | (49)            |                  |         | (56)           |         | 57            | 61.00  |
| Bizygomatic breadth  | 118       |                 |                  | 124 ??  | 139            |         | 131 ?         | 128.00 |
| Bigonial breadth     | 89        |                 |                  |         | 98             |         | 99            | 95.33  |
| Face height          | 116       |                 |                  |         | 119            |         | 114           | 116.33 |
| Upper face height    | 67        |                 |                  |         | 71             |         | 67            | 68.33  |
| Nose height          | 44        |                 |                  |         | 50             |         | 50            | 48.00  |
| Nose breadth         | 24 ?      |                 |                  |         | 25             |         | 22 ?          | 23.66  |
| Upper nasalia br.    | 13        |                 | (9)              |         | 12             |         | 14            | 13.00  |
| Lower nasalia br.    | 17 ?      |                 |                  |         | 18             |         | 16 ?          | 17.00  |
| Left orbit height    | 31        |                 |                  |         | 31 ?           |         | 30 ?          | 30.66  |
| Right orbit height   | 31        |                 |                  |         | 32             |         | 31            | 31.33  |
| Left orbit breadth   | 36        |                 |                  |         | 41 ?           |         | 40 ?          | 39.00  |
| Right orbit breadth  | 38        |                 |                  |         | 40             |         | 39            | 39.00  |
| Interorbital breadth | 20        |                 | (19)             |         | 24             |         | 23 ?          | 21.75  |
| Biorbital breadth    | 93        |                 | (96)             | (96)    | 104            |         | 101           |        |
| Ext. palate length   | 56        |                 |                  |         | 56             |         | 51            | 54.33  |
| Ext. palate breadth  | 62        |                 |                  |         | 69             |         | 64            | 65.00  |
| Symphysis height     | 36        |                 |                  |         | 39             |         | 36            | 37.00  |
| Mandibular length    | 106       |                 |                  |         | 103            |         | 119 ?         | 106.33 |
| Bicondylar breadth   | 108 ?     |                 |                  |         | 121            |         | 124 ?         | 117.66 |
| Minimum ramus br.    | 32        |                 |                  |         | 33             |         | 33            | 32.66  |
| Mandibular angle     | 132       |                 |                  |         | 115            |         | 137           | 128.00 |
| Cranial index        | 79.89     | 76.88           | 75.28            | 72.47   | 75.66 ?        | 77.01 ? | 66.67         | 74.84  |
| Length-ht.           | 75.86     | (73.66)         | (66.85)          | 71.35   | 73.02 ?        |         | 72.92         | 73.29  |
| Length-auricular ht. | 66.09     | 62.90           | 61.24            | 60.67   | 63.49 ?        |         | 63.54         | 62.99  |
| Breadth-ht.          | 94.96     | (95.80)         | (88.81)          | 98.45   | 96.50          |         | 109.38        | 99.82  |
| Breadth-auric. ht.   | 82.73     | 81.82           | 81.34            | 83.72   | 83.92          |         | 95.31         | 84.81  |
| Fronto-parietal      | 64.75     | 67.13           | 68.66            | 69.77   | 68.53          |         | 75.78         | 69.10  |
| Cranio-facial brs.   | 84.89     |                 |                  | 96.12 ? | 97.20          |         | 102.34 ?      | 95.14  |
| Zygo-frontal         | 76.27     |                 |                  | 72.58 ? | 70.59          |         | 74.05         | 73.37  |
| Fronto-gonial        | 98.89     |                 |                  |         | 100.00         |         | 102.06        | 100.49 |
| Zygo-gonial          | 75.42     |                 |                  |         | 70.50          |         | 75.57         | 73.83  |
| Facial index         | 98.31     |                 |                  |         | 85.61          |         | 87.02 ?       | 90.31  |
| Upper facial         | 56.78     |                 |                  |         | 51.08          |         | 51.15 ?       | 53.00  |
| Nasal                | 54.55 ?   |                 |                  |         | 50.00          |         | 44.00 ?       | 49.52  |
| Left orbital         | 86.11     |                 |                  |         | 75.61          |         | 75.00         | 78.91  |
| External palatal     | 110.71    |                 |                  |         | 123.21         |         | 125.40        | 116.47 |

NOTE: Measurements in parentheses have no objective value. They are uncertain either because of incompleteness of the skull or because they were taken on photographs (cranial arcs and chords), an inaccurate procedure even with exact scaling and allowance for distortion. The Tsangli skull, published by Duckworth, could not be remeasured.



skulls are striking enough to favor several sources for the first populations of Greece.<sup>27</sup> It is a precarious task to try to discover these sources.

A geneticist might object on four grounds to the assumption that morphological similarity of one or other of the exiguous groups of crania from Neolithic Greece with any outside group probably shows eventual genetic connection. First he would point out that the various populations around Greece could not differ in many discontinuous genetic features since human breeding groups even in Palaeolithic phases of great isolation have never been sufficiently selected to form "pure races."<sup>28</sup> Second, between slightly isolated expanding populations in the fourth and third millennia B.C. any average differences in phenotype would reflect slight dynamic differences in gene frequencies, or "gene pressures,"<sup>29</sup> so that degree of genetic connection is determinable only from large samples and by some system of character frequency calculations more inclusive than average measurements and far less crudely simplified than the "types" used in this paper. Third, although practical genetics successfully assumes phenotypic similarity to measure genotypic similarity in general, there is no experimental testing of this except indirectly in stock-breeding, there are many exceptions, and in man this does not hold true for individuals at all except between the major races. Fourth, we know so little human genetics that we know neither the relative values for heredity of different morphological traits of the skeleton or of soft parts, nor the values of linkage groups (of which types are an overschematization), single gene traits, or multiple gene characters (such as measurable dimensions) in assessing relationships.

The last three objections invalidate any system of measuring degree of population relationship if the system omits many morphological details, as with use of average measurements alone. And in addition, the Greek Neolithic sample is too scanty.

But the individuals described do show the presence of hereditary tendencies, even if not their true frequencies and combinations. And it is possible to deduce from these presence (rather than degree) of genetic connection, since the first objection listed above is weakened by the historical context. Though from its morphology one cannot point to a specific origin for an isolated skeleton, the historical situation provides that Greece's Neolithic inhabitants entered during the fourth millennium B.C. phase of population increase and racial change<sup>30</sup> from regions immediately to the east, south, or north of Greece. And comparisons with available samples of mesolithic and later populations in these directions at least points out plausible connections of tendencies or of types (rather than individuals) from similarity in physical appearance. Of course lack of comparative material from many areas distorts any picture which may emerge.

*Tombs of the Mesara*, London, 1924, pp. 126-128, plate LIX. Unpublished Neolithic skulls excavated by Pendlebury and seen in 1938 in the Athens Anthropological Museum.

<sup>27</sup> Of course a single origin is possible. No ethnic groups at this time could have been racially homogeneous, and some group might have been as diversified as these Neolithic skulls from Greece indicate.

<sup>28</sup> T. Dobzhansky, *Genetics and the Origin of Species*, New York, 1937, pp. 185-191; T. D. McCown and Sir Arthur Keith, *The Stone Age of Mount Carmel* II, Oxford, 1939, p. 17 esp.; W. W. Howells, "Fossil Man and the Origin of Races," *Am. Anthr.* XLIV, 1942, pp. 182-193.

<sup>29</sup> S. Wright, "Evolution in Mendelian Populations," *Genetics* xvi, 1931, pp. 97-159.

<sup>30</sup> The great importance of change in population (breeding group) size for shifts in gene frequencies is analyzed in detail by S. Wright, *op. cit.*



With these difficulties and limitations recognized, the Basic White or robust Mediterranean type suggests roughly contemporary South Anatolian,<sup>31</sup> coastal Syrian,<sup>32</sup> or even Palestinian<sup>33</sup> derivations, perhaps with Mesopotamia in the background,<sup>34</sup> rather than extraction from European Upper Palaeolithic survivors.<sup>35</sup> The gracile Mediterranean element puts more stress on the Natufians or on early dynastic and late predynastic Upper Egyptians<sup>36</sup> than on other early Near Eastern or Mediterranean populations, presumably because of lack of data. The Dinaric-Mediterranean tendency stresses connections with the lower Danube and eastern Balkans<sup>37</sup> more than with Lower Egyptians,<sup>38</sup> since the Nordic-Iranian Tsangli skull's resemblance to the Rusé skulls and others of Gumelnitsa date from North Bulgaria<sup>39</sup> strengthens the northeastern connection. Earlier tendencies in a Dinaroid direction in Central Europe are just perceptible in the Kaufertsberg and Hohlenstein Mesolithic Bavarians<sup>40</sup> and in the early but poorly dated Nagy Sap skull.<sup>41</sup> But it is the Alpine tendencies in Neolithic Greece which suggest more probable connection with Mesolithic inhabitants of Central Europe.<sup>42</sup> Eastern Alpine derivations from the south-east<sup>43</sup> are unlikely at this date on the basis of the inadequate Alpine tendencies so far discoverable in Neolithic Greece.

<sup>31</sup> R. W. Ehrich, "Preliminary Notes on Tarsus Crania," *AJA*. xlv, 1940, pp. 87-92, skulls 9-14, plates xv and xvi.

<sup>32</sup> H. V. Vallois, "Note sur les ossements humains de la nécropole énéolithique de Byblos," *Bull. du Musée de Beyrouth* i, 1937, pp. 23-24.

<sup>33</sup> A. Hrdlička, "Skeletal Remains," in P. L. O. Guy and R. M. Engberg, "Megiddo Tombs," *OIP*. xxxiii, 1938, pp. 192-208. Some of the Natufian skulls, such as the Erq-el-Ahmar female, resemble the Megalithic trend in Basic White as seen in the Hageorgitika skull. But most Natufians average between the less linear central trend of the Greek Basic White and the gracile Mediterranean type. Compare H. V. Vallois, "Les ossements Natoufiens d'Erq-el-Ahmar (Palestine)," *L'Anthr.* xvi, 1936, pp. 529-543, skull no. 2, with T. D. McCown, "The Natufian Crania from Mt. Carmel, Palestine, and their Interrelationships," *Ph.D. dissertation*, University of California Library, Berkeley, 1939.

<sup>34</sup> Sir Arthur Keith, "Report on the Human Remains," in H. R. Hall and C. L. Woolley, *Ur Excavations. Al 'Ubaid* i, Oxford, 1927, pp. 214-240.

<sup>35</sup> C. S. Coon, *The Races of Europe*, p. 84, p. 657, table 1.

<sup>36</sup> G. M. Morant, "A Study of Egyptian Craniology from Prehistoric to Roman Times," *Biometrika* xvii, 1925, pp. 1-52.

<sup>37</sup> *Necrolynthia*, Table iv, column 1, based on material of Popov, Drončilov, Jaranov, Pittard, and Doniči from Devetaskata and Salmonovo, Rusé, Kubrat, Cucuteni, and Lipcani, respectively.

<sup>38</sup> G. Elliot Smith, *The Ancient Egyptians*, London and New York, 1923, so-called Gizeh type. T. L. Woo, "A Study of Seventy-One Ninth Dynasty Egyptian Skulls from Sedment," *Biometrika* xxii, 1930-31, pp. 65-93.

<sup>39</sup> K. Drončilov, "Prehistoric Skulls from Bulgaria," *Izv. Bulg. Arch. Inst.* ii, 1924, pp. 187-201, and unpublished measurements of Kubrat skulls by D. Jaranov, summarized by J. H. Gaul, "The Neolithic Period in Bulgaria," *Ph.D. dissertation*, Harvard University, Cambridge, 1940; and included in *Necrolynthia*, loc. cit.

<sup>40</sup> W. Scheidt, *Die Eiszeitlichen Schädelfunde aus der grossen Ofnethöhle, und von Kaufertsberg bei Nördlingen*, München, 1923; W. Gieseler, "Anthropologische Bericht über die Kopfbestattung und die Knochentrümmerstätte des Hohlensteins im Lonetal," *Verh. der Deutsches Ges. für Rassenf.* ix, Stuttgart, 1938, pp. 213-229.

<sup>41</sup> F. von Luschan, "Die Funde von Nagy Sap," *MAGW.* ii, 1872, pp. 303-306, and *ZfE.* xix, 1887, pp. 565-566.

<sup>42</sup> Cf. W. Scheidt, *op. cit.*, skulls (4) K 1802, 1806, 1800, 1809, 1801.

<sup>43</sup> M. M. Rix and L. H. D. Buxton, "The Anthropology of Prehistoric Cyprus," *Man* xxxviii, 1938, pp. 91-92, conclude from unpublished Neolithic skulls that the earliest Mediterranean race settlers were followed by invaders "of Armenoid stock," presumably like the Eastern Alpines of the Bronze Age (a true "Armenoid" does not evolve in the Near East until the Iron Age, but the term is often misused).



V. G. Childe's theory of Neolithic A's partial southeastern origin, suggested by geometric patterns of painted pottery, use of figurines, and stamp "seals" <sup>44</sup> parallel with some elements in the Tell Halaf complex and perhaps in the Cypriote Neolithic, <sup>45</sup> might be confirmed by rugged and gracile Mediterranean skulls from Hageorgitika, the Heraeum, Nemea, Athens, and Astakos. This distribution could even suggest a westward movement, reaching Italy finally, <sup>46</sup> together with Neolithic B traditions. A European Mesolithic hunter contribution to Neolithic culture is conceivably reflected in the earliest Greek stone chipping techniques, <sup>47</sup> the use of boars' tusk pendants, <sup>48</sup> antler axe sleeves, and "free field" meander and spiral designs, <sup>49</sup> and might be confirmed by the Alpine influence mentioned at Choirospilia, Athens, and possibly Servia. Connection of some sort between the Greek Neolithic B population and Gumelnitsa and even Tripolye cultures, as suggested by the megaron house as well as S spirals and other pottery designs, <sup>50</sup> might be confirmed by the Dinaric-Mediterranean and Iranian trends seen at Servia, Athens, and Tsangli. Though the crania mentioned (1 Ser, 1 Ts, and 27 AA) are late enough in date to suggest movement from North to South, they would support movement in the opposite direction almost equally well.

The present material is therefore too weak to give more than tentative confirmation to various partly conflicting archaeological pictures of the origin of the Hellenes' predecessors in Greece. Many times the present volume of material is needed not only from Greece itself but also from all tangent areas. At present the scope of individual variation among a scant dozen Neolithic skulls from seven sites scarcely allows any concept of a central tendency, and through slight overstatement of any of the preceding comparisons would allow almost any conclusion.

But individual diversity compels one final suggestion: that the striking divergences in culture between Greek Neolithic villages <sup>51</sup> are well paralleled by the racial heterogeneity characteristic of the skeletal material.

THE DANIEL BAUGH INSTITUTE OF ANATOMY OF  
THE JEFFERSON MEDICAL COLLEGE

J. LAWRENCE ANGEL

<sup>44</sup> V. G. Childe, *The Dawn of European Civilization*, New York, Knopf, 1939, p. 60.

<sup>45</sup> P. Dikaios, "New Light on Prehistoric Cyprus," *Iraq* vii, 1940, pp. 69-83.

<sup>46</sup> H. Frankfort, *Studies in Early Pottery of the Near East II. Asia, Europe and the Aegean, and their Earliest Interrelations*, London (R.A.I. Occasional Papers No. 8, 1927), pp. 129-130.

<sup>47</sup> A. Marcovits, "Recherches sur la Période de la Pierre en Grèce," *Rev. Anthr., C.R. de la Soc. Hell. d'Anthr.* lxi, 1931, pp. 7-8; *ibid.* "Περὶ τῶν μέχρι σήμερον ἐρευνῶν ἐπὶ τῆς λιθικῆς περιόδου τῆς Ἑλλάδος," *Ἑλλ. Ἀνθρ. Ἐτ. Πρακτ.* vii, 1929, pp. 114-134.

<sup>48</sup> G. Mylonas, *Excavations at Olynthus I, the Neolithic Settlement*, Baltimore, Johns Hopkins Press, 1929, pp. 82-83, fig. 94.

<sup>49</sup> H. Frankfort, *op. cit.*, pp. 36-37.

<sup>50</sup> V. G. Childe, *op. cit.*, pp. 62-63. C. W. Blegen, "Athens and the Early Age of Greece," *Athenian Studies presented to W. S. Ferguson, Harvard Stud. in Class. Phil.*, Suppl. I, 1940, pp. 1-9, implies even less certainty than Childe regarding origins.

<sup>51</sup> S. Weinberg, "Remains from Prehistoric Corinth," *Hesperia* vi, 1937, pp. 487-524.



## AN IVORY RELIEF IN THE METROPOLITAN MUSEUM OF ART

IN 1917 the Metropolitan Museum acquired—as a gift from J. Pierpont Morgan—a Greek ivory relief of two female figures (figs. 1–4).<sup>1</sup> It was one of many objects in the Morgan Collection and was, therefore, shown with the rest of that collection in the Morgan Wing. Recently permission was given to transfer this piece to the Greek and Roman Department and it is now displayed in the Second Greek Room. In its new setting, with related, contemporary material, it is being “discovered” for the first time by Museum visitors and its important place in Greek art is now apparent. The relief is in fact one of those rare things—a comparatively well-preserved, carefully executed work of art of the seventh century B.C.—an important creation of the early archaic period of Greece. In spite of its small size it has a monumental character, and magnification brings out the grandiose conception (figs. 6–8).

The illustrations speak for themselves, so only a short interpretative description is necessary. First, regarding the function of the relief: it is flat at the back (fig. 2), and there are two holes for fastening, one in the middle of the figure on the (spectator's) left, the other in the lower part of her companion; remains of rust suggest that the nails were of iron. Evidently the relief served as an ornament of something. It is complete in itself, for the right and left edges are smooth. There may, however, have been other, similar reliefs, which formed an ensemble decorating perhaps a box or chest. One is reminded of Pausanias' <sup>2</sup> description of the wooden chest of Kypselos “with figures on it, some of ivory, some of gold, others carved out of the cedar wood itself.”

The two women on the relief, therefore, form an independent group, possibly related to other groups in a larger composition, as was the case in the Kypselos chest.<sup>3</sup> Who are they? Let us examine them in detail and see whether their action gives a clue to an interpretation. Both figures stand erect, with body frontal, feet in profile. Only the one on the (spectator's) right has her head preserved, and it is turned slightly to her left. She wears a himation, loosely draped over her shoulders, and holds one edge of it with her right hand, letting the rest fall down to reveal her body. The himation is foldless and has an all-over pattern of alternating single meanders, with a border of dots along the upper edge and interlocking spirals along the lower one. Her hair falls loosely down the shoulders. The left hand is significantly placed between the breasts.

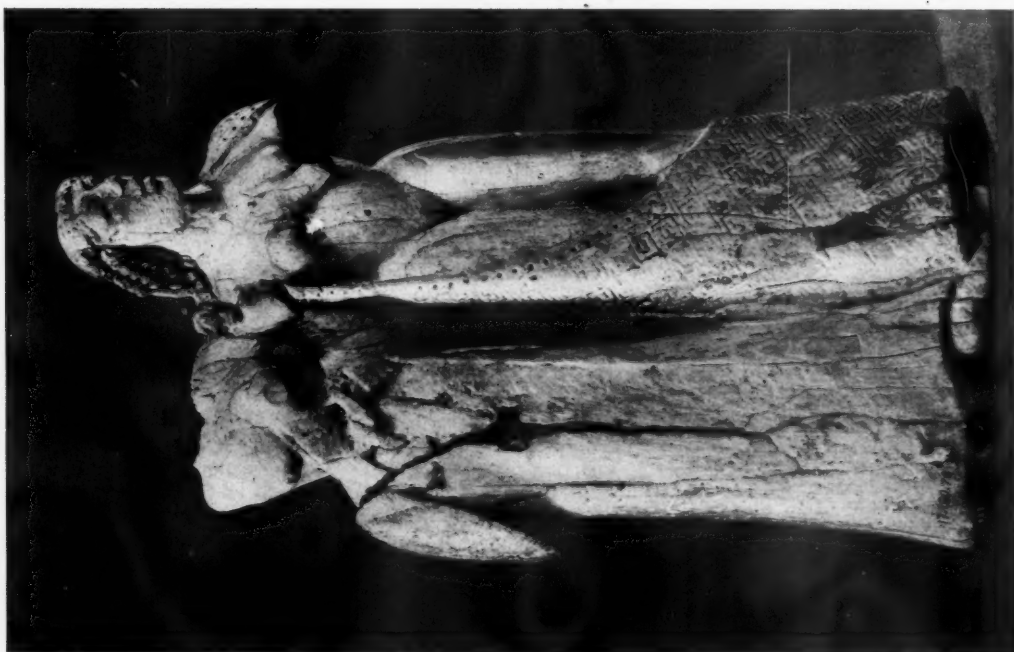
The other, now headless, figure wears an undecorated, foldless peplos, fastened on the left shoulder, but not on the right; the loose material is allowed to fall over the right arm and along the thigh. That this rounded, pouch-like excrescence is part of the peplos—and ordinarily would be fastened on the right shoulder—is indicated

<sup>1</sup> Acc. no. 17.190.73. Height  $5\frac{3}{8}$  in. (13.7 cm.), width  $2\frac{3}{4}$  in. (7 cm.), thickness  $\frac{5}{8}$  in. (1.6 cm.). The ivory has split, cracked, and peeled in places. The most important missing parts are the head, the right arm (except the hand) and the front part of the left foot of the figure on the left; part of the left arm, the fingers of the right hand, and parts of the feet of the figure on the right; the head of the latter was broken off, but its present position is certain, as the fractures fit.

<sup>2</sup> V, xvii, 5.

<sup>3</sup> Cf. Frazer's commentary on Pausanias v, xvii, 11.

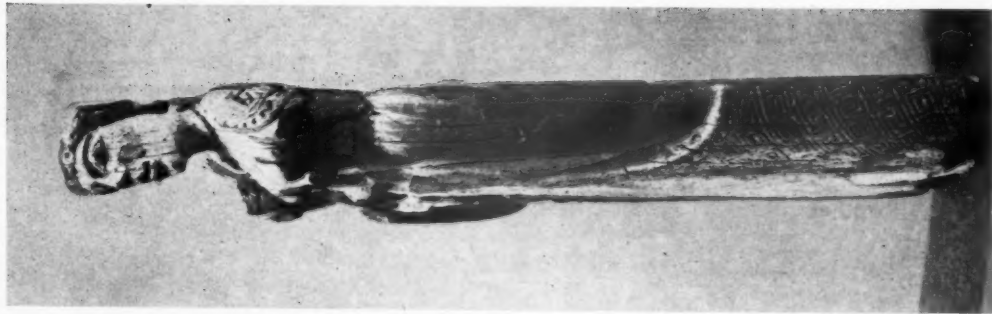
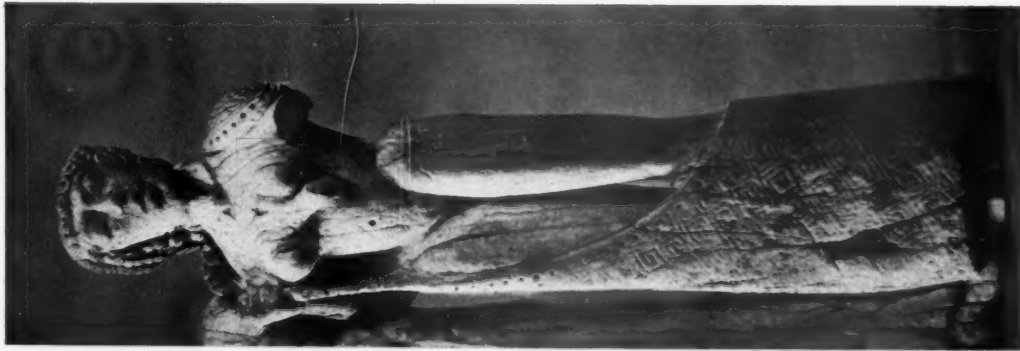




FIGS. 1, 2.—IVORY RELIEF IN THE METROPOLITAN MUSEUM  
(Courtesy of the Metropolitan Museum of Art)



FIGS. 1, 2.—IVORY RELIEF IN THE METROPOLITAN MUSEUM  
(Courtesy of the Metropolitan Museum of Art)



FIGS. 3, 4.—IVORY RELIEF IN THE METROPOLITAN MUSEUM  
(Courtesy of the Metropolitan Museum of Art)



FIG. 5.—LIMESTONE STATUETTE IN THE  
LOUVRE, FROM A CAST





FIG. 6.—IVORY RELIEF IN THE METROPOLITAN MUSEUM. ENLARGED  
(Courtesy of the Metropolitan Museum of Art)





FIG. 7.—IVORY RELIEF IN THE METROPOLITAN MUSEUM. ENLARGED  
(Courtesy of the Metropolitan Museum of Art)





FIG. 8.—IVORY RELIEF IN THE METROPOLITAN MUSEUM. ENLARGED  
(Courtesy of the Metropolitan Museum of Art)



by the continuous border along the edge from the left shoulder down. (The splitting of the ivory accounts for the present distance from the thigh). The lower part of the peplos has two vertical ridges which at first sight suggest a second garment; but they are not original; they are due to the peeling of the ivory, for the intervening surface is rough, not smooth like that at the sides. It is clear, therefore, that the figure wore only a peplos. Both hands are engaged with the belt, each holding one end of it (fig. 9). She is evidently untying it after having bared her right breast, for if she were tying it the garment would be fastened on the right shoulder.<sup>4</sup>

It should not be difficult after this description to identify the two figures. The half-draped woman, in the act of unveiling herself, with her head turned, is surely Aphrodite, a descendant of the Oriental nature goddess Astarte and a predecessor of the Cnidian Aphrodite. Her gesture would be most unusual for a mortal in the early archaic period, but is appropriate and common in representations of the Goddess of Love.<sup>5</sup>

But who is her companion? Who else but Peitho, "Persuasion,"<sup>6</sup> who was associated with Aphrodite at least as early as the seventh century. In Hesiod's *Works and Days* 73, πόντια Πειθῶ helps to bedeck Pandora, along with Athena, the Graces, and the Hours.<sup>7</sup> Sappho (Schol. Hes. *loc. cit.*) calls Peitho a daughter of Aphrodite; Ibykos (frgt. 5) calls her ἡ ἄγανοβλέφαρος, "mild eyed;" Aeschylus (*Hik.* 1041) refers to Aphrodite as the mother of Peitho and Pothos; and Pindar (*P.* ix, 39) speaks of "the keys of wise Peitho that unlock the shrine of love." There was a cult of Aphrodite Pandemos and Peitho in Athens which may have been an early one, for Pausanias assigned its introduction to the mythical Theseus: "When Theseus had united into one state the many Athenian demes, he established the cults of Aphrodite Pandemos and of Peitho. The old statues no longer existed in my time, but those I saw were the work of no inferior artist."<sup>8</sup>

It is apparent that Peitho was an important and well-known personage in Aphrodite's retinue in early times. Her association with Aphrodite in our relief would therefore be in accordance with Greek seventh-century beliefs. And when she unties her girdle she brings to mind the famous passage in the *Iliad* (xiv, 214 ff.) where Aphrodite loosens her κεστόν ἱμάντα ποικίλον "wherein are fashioned all manner of allurements; therein is love, therein desire, therein dalliance—beguilement that steals the wits even of the wise" (tr. A. T. Murray).

<sup>4</sup> As Mr. Leicester Holland pointed out to me.

<sup>5</sup> Cf. on this subject Seyrig, *AJA.* xlviii, 1944, p. 22.

<sup>6</sup> On Peitho cf. the articles by Pottier in Daremberg and Saglio's *Dictionnaire*, by Weizsäcker in Roscher's *Lexikon*, and especially by Voigt in *RE.* xix, 1938, cols. 198 ff.

<sup>7</sup> In the *Theogony*, 349, the name Peitho is given to an Oceanid.

<sup>8</sup> I, 22, 3. According to Nicander of Colophon, however, it was Solon who introduced the worship of Aphrodite and Peitho into Athens (Athenaios xiii, 569 D, and Harpokration s.v. πάνδημος Ἀφροδίτη).

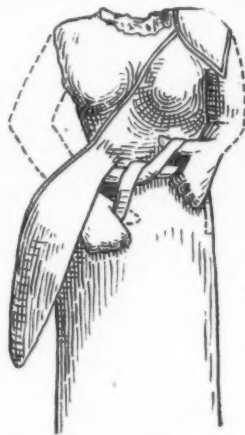


FIG. 9.—DRAWING OF THE UPPER PART OF ONE OF THE FIGURES SHOWN IN FIG. 1

(By Lindsley F. Hall)



The period of our relief can be approximately determined. Stylistic comparisons suggest the time of the "Auxerre" limestone statue in the Louvre (fig. 5) and of the terracotta and bronze statuettes which according to our present evidence are dated in the third quarter of the seventh century. (Some are conveniently grouped in Jenkins's *Dedalica*, pls. v and vi). We find there similar v-shaped structures of faces, low foreheads surmounted by horizontal rows of ringlets, globuled tresses, full lips, large, protruding eyes, firm, rounded chins, and voluted ears. The Auxerre statuette



FIG. 10.—PEITHO, APHRODITE, AND EROS, ON THE FRAGMENT OF AN ATTIC SKYPHOS IN THE METROPOLITAN MUSEUM  
(Courtesy of the Metropolitan Museum of Art)

(once at Auxerre, now in the Louvre) supplies a particularly apt comparison; for she too wears a belted, foldless peplos ornamented with a meander pattern, and holds one hand between her breasts; and she too has a long upper lip like our Aphrodite. But there are obvious relations also with Corinthian, Cretan, and Attic heads <sup>9</sup> and with the bronze statuette from Dreros,<sup>10</sup> whose hips protrude from the waist, in a manner similar to that in the Morgan piece. The seventh-century ivories from the Laconian Sanctuary of Artemis Orthia<sup>11</sup> also supply some points of similarity, though not close ones. Nothing whatever is known of the provenance of our ivory

<sup>9</sup> Cf. Jenkins, *Dedalica*, pl. v, 7, 8; vi, 1, 8; vii, 2.

<sup>10</sup> Marinatos, *AA.* 1936, cols. 217 ff., figs. 2, 3 and *BCH.* lx, 1936, pl. LXIII, p. 485; Richter, *Kouroi*, p. 41 f., pl. iv, fig. 11.

<sup>11</sup> Dawkins, *Artemis Orthia*, pls. xci ff.



relief. In view of the evidence, therefore, it would be hazardous to attribute it to a specific locality. It is better to content ourselves with the chronological assignment.

In Greek art the earliest extant appearance of Peitho, as far as I am aware, is on the early fifth-century skyphos in Boston<sup>12</sup> with Makron's representation of Paris abducting Helen. Aphrodite and Peitho—both identified by inscriptions—are there seen in action, behind Helen, "persuading" her to go with Paris.<sup>13</sup> From that time on, Peitho frequently occurs as one of Aphrodite's satellites, along with Himeros, Eros, and others. There are numerous representations of her on Attic vases and on marble reliefs. We may take this occasion to illustrate an unpublished fragment of a red-figured Attic skyphos in the Metropolitan Museum,<sup>14</sup> painted around 460–450, with parts of four figures, two of which are identified by inscriptions as Aphrodite and Peitho (fig. 10). A comparison with the ivory group shows how greatly the conception of the two goddesses has changed in the intervening century.

If our interpretation of the Morgan ivory relief is correct, it furnishes the earliest known Peitho in Greek art and the earliest known group of Aphrodite and Peitho. Above all it enlarges our vision of Greek seventh-century art and mythology.

METROPOLITAN MUSEUM  
OF ART, NEW YORK.

GISELA M. A. RICHTER

<sup>12</sup> No. 13.186. *FR.* pl. 85; Pfuhl, *MuZ.*, fig. 435; Beazley, *Attic Red-Figure Vase-Painters*, p. 301, no. 1.

<sup>13</sup> May we conjecture that adjoining the Morgan relief there was a group of Paris and Helen toward whom Aphrodite's head is turned?

<sup>14</sup> 07.286.51. Attributed by Beazley, *op. cit.*, p. 961, to an undetermined follower of Douris.



## GLEANINGS FROM CRETE

### 1. THE DRAGON OF BABYLON IN CRETE?

WHEN publishing the seal-impressions from H. Triada<sup>1</sup> I advanced a few preliminary remarks in support of my thesis that there was a large contribution of motifs and suggestions from the arts of the Near East in the formation of Minoan art. It was my intention to develop this thesis further and expand my arguments in a Corpus of Cretan-Mycenaean gems, which I had then started, and which so far I have not been able to bring to completion. Among the representations of the seal impressions some are of great interest and unique, definitely furthering the suggestion of an imitation of Oriental subjects. One of the finest and most singular is a signet type representing a woman, wearing *kaunakes*, riding on the back of a strange animal or monster. The imprint, of which four specimens were found, is derived from an elliptical ring. A signet type from a lentoid ring, of which three replicas were found, again offers a representation of the forepart of two fantastic creatures entirely similar to the one in the preceding scene. The former examples are placed in an exotic surrounding indicated by the presence of a papyrus plant (fig. 1 a-b).<sup>2</sup>

At the time of my publication both the motif of the woman seated sidewise on a quadruped, and the kind of creature on which she is riding, were unique for Minoan civilization. In that publication I compared with our creature a similar image on a rough carving of a pictographic seal (fig. 2), for which Evans has suggested the interpretation of a camel.<sup>3</sup> This interpretation is improbable, inasmuch as the Minoan artist would have drawn his inspiration directly from the view of this animal in its original country of Arabia or neighboring Oriental lands. It is known, in fact, that the camel reached Egypt in relatively late times, and representations of it do not go further back than the Saite age.<sup>4</sup> In Asia too, artistic representations of camels cannot be found before the time of Assyrian and Hittite reliefs and seals, perhaps about the ninth century B.C. Furthermore, one of the elements indicated on the creature of our Minoan signet is the large paw or claw at the end of the leg which is bent at the hock in a pronounced angle. The most characteristic features are quite different from those of a camel: in my opinion, they correspond essentially to the characteristics of the serpent-griffin of Mesopotamian religion, more popularly known as the "Dragon of Babylon" referred to in the well known Daniel story of the Apocrypha.<sup>5</sup>

Numerous discoveries and studies in recent years now enable us to trace fairly

<sup>1</sup> "Le cretule di H. Triada e di Zakro," *Annuario* viii-ix, pp. 71 ff.

<sup>2</sup> *Ibid.*, pp. 136 f., nos. 132-33, figs. 148-49, and pl. viii.

<sup>3</sup> A. Evans, *Scripta Minoa*, Oxford, 1909, p. 133, fig. 73 b.

<sup>4</sup> F. Chabat, *Ét. sur l'antiquité historique*, Paris, 1873, p. 408 ff.; A. Erman, *Aegypten und ägyptisches Leben im Altertum* i, Tübingen, 1885, p. 652; G. Maspéro, *Hist. ancienne des peuples de l'Orient* i, Paris, 1895, p. 32. Thousands of years before, however, a camel head was represented on a terracotta found near Abydos, belonging to about 4000 B.C., according to O. Keller, *Die antike Tierwelt* i, Leipzig, 1909, pp. 275 ff.

<sup>5</sup> *Bel and the Dragon* v. 27, following Daniel in the *Septuagint*; see A. Rahlfs, *Septuaginta* ii, Stuttgart, 1935, p. 940.



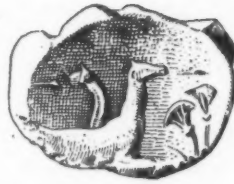


FIG. 1—A-B.—TWO SEAL-IMPRESSIONS FROM H. TRIADA  
(*Annuario viii-ix*, p. 137, figs. 148-49)

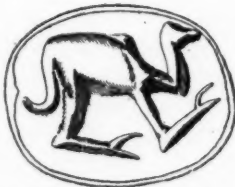


FIG. 2.—MINOAN PICTO-  
GRAPHIC SEAL  
(Evans, *Scripta Minoa*,  
p. 133, fig. 73 b)



FIG. 3.—CYLINDER SEAL FROM KISH  
(Frankfort, *Cylinder Seals*, pl. xxi, i)



FIG. 4.—TERRACOTTA RELIEF FROM NIPPUR  
(Hilprecht, *Ausgrabungen im Bêl Tempel zu Nippur*, p. 76, fig. 56)



FIG. 5.—LOUVRE. BRONZE HEAD OF  
THE DRAGON OF BABYLON  
(Heuzey, *Les Origines orientales de l'art*, pl. vi)



exactly the main features and evolution of this fantastic being of the Oriental demonic world: one of the most heterogeneous, a "truly apocalyptic" creature, called *mushrushshu* (that is, "the raging serpent"<sup>7</sup>), summarily dealt with for the first time by L. Heuzezy.<sup>8</sup> It is a quadruped in which, as the name itself implies, the serpentine quality prevails. The head is that of a snake, surmounted by two horns. The scales on the body also indicate a serpentine nature, but otherwise it has a thick tubular and perfectly horizontal shape. The forelegs are usually those of a lion or a cat, the hind legs those of an eagle, the horny tail that of a scorpion. In the earliest representations we see on the head beside the curved horns a double tuft of feathers, as well as a lock of hair ending in a spiral on the neck: that is, the elements constituting the symbolical headdress of the ancient divinities of Chaldaea. This appears e.g. on the relief of the celebrated libation vase offered by Gudea of Lagash to Ningizzida, on which two similar monsters, upright on their eagle claws, act as "supporters" for the god's emblem, which is composed of two serpents, also upright and interlaced in the manner of a caduceus. On Gudea's seals the dragon follows the procession conducted by the master toward Ea; or the god himself stands on the dragon. The monster persists through the centuries as the sacred animal of several deities, Marduk and Nabu in particular. We find them standing on it and dominating it as late as the Assyrian and Neo-Babylonian periods, and not only on numerous seal cylinders, but also on large size sculpture. In sculpture it will be enough to mention the monolith of Esarhaddon from Senjirli and the rock reliefs of Malatiya. Although the creature's main features are maintained down to the latest monuments, many a detail is bound to vary throughout the centuries. It is not true, however, that the creature becomes wingless in the more advanced stages, while only in the earliest representations is it winged. It is wingless as early as the dynasty of Akkad, as is evident from a seal from Kish (fig. 3), on which Ningizzida sits on a throne resting on the monster's back.<sup>7</sup> Here we find practically the same shape in which the monster—called also in Assyrian *sirushu*<sup>8</sup>—appears, in brilliantly colored faience, repeated in several rows and with admirable decorative effect, around the Ishtar Gate of Babylon, dedicated about 580 B.C. by Nebuchadnezzar to Marduk (fig. 6).<sup>9</sup> A long series of monuments, particularly seals, testifies to the continuity of the motif throughout this extensive stretch of time, sometimes in forms almost

<sup>7</sup> "Les Deux dragons sacrés de Babylone et leur prototype chaldéen," *Rev. d'assyriologie et d'arch. orient.* vi, 1907, pp. 95 ff. = *Les Origines orientales de l'art*, Paris, 1891-1915, pp. 331 ff.; W. H. Ward, *The Seal Cylinders of Western Asia*, Washington, 1910, pp. 390 ff., figs. 1279 ff.; H. Prinze, s.v. *Gryps*, in *RE.* vii, 1912, col. 1906 ff.; E. Unger, s.v. *Mischwesen*, in Ebert, *RV.* viii, 1927, pp. 213 f., § 45; E. Douglas van Buren, "The God Ningizzida," *Iraq* i, 1934, pp. 70 ff., 78 ff.; H. Frankfort, *Cylinder Seals*, London, 1939, pp. 121 ff. There is no certain identity of our dragon with another monster studied by Frankfort, *Iraq* i, pp. 8 ff., pl. 1 c.

<sup>8</sup> Frankfort, *op. cit.*, pl. XXI, i.

<sup>9</sup> Cf. Ward, *op. cit.*, p. 400.

<sup>9</sup> It has been suggested that the priests of the temple of Esagila, the main temple of Babylon dedicated to Marduk by the same king, may have nourished in the temple some kind of reptile, probably an arval, which can be found in the neighborhood of the city, and that they may have exhibited it in the semi-darkness of the temple as a living *sirushu*. In this case it would not be strange if the creature did not survive the concoction of hair, fat and pitch administered to it by Daniel: cf. R. Koldewey, *Das wieder erstehende Babylon*, Leipzig, 1913, p. 46, figs. 31, 32; *idem*, *The Excavations at Babylon*, London, 1914, p. 46. For allusions in cuneiform texts see E. Schrader, *Die Keilinschriften und das Alte Testament*,<sup>3</sup> Berlin, 1905, p. 504.



identical with that described above, at other times with considerable variation. For the age of Hammurabi we have, in addition to a couple of cylinders,<sup>10</sup> an important terracotta relief excavated at Nippur (fig. 4).<sup>11</sup> Here the dragon stands alone, facing right, its form strongly recalling previous descriptions, as well as that of the creature on our Minoan signet. But in this case the peculiar crown noticed on the earliest monuments persists. On the other hand, a great variety of headdresses can be seen on the reliefs of the numerous kudurrus,<sup>12</sup> or border-stones, which bridge the gap between the Kassite and the Assyrian ages. In these reliefs the forepart of the monster projects from a base supporting either Marduk's spear or Nabu's pillar; it is therefore associated as one more symbol of these gods, and it is identified with the *mushrushshu* Tiamat, subdued according to myth by Marduk. On these stones the old headdress with two lateral feathers is still sometimes found, but more often the feathers are transformed into two pointed horns, while the lateral horns become smaller, sometimes resembling two ears, or at other times almost invisible. Thus the monster's head is transformed into the head of a horned serpent, often achieving the aspect of the creature we have seen on the Ishtar Gate, where only one horn is represented, the other being concealed behind it. Therefore there is no justification for dating the fine bronze head of our creature in the Louvre (fig. 5)<sup>13</sup> too late simply because of the absence of the early composite crown. In this head the characteristic features of a snake are recognizable, though it was at first mistaken for an antelope head. These features are the round eye formed by two concentric circles, the greatly elongated mouth, divided in two by the horizontal cut of the lips in relief, and the nose marked by a series of parallel transverse strokes. A series of oblique lines on the neck may be a residue of the original spiral lock falling over the nape.

The shape of this bronze head is closest to the animal head on our seal-impression of the riding woman (fig. 1). All legs of the latter have thick thighs like wild beasts' thighs; but the paws of the hindquarters, the only ones preserved, seem to be open like huge eagle claws on several representations of the *mushrushshu*. We must remember, however, that on the kudurrus, lion's paws sometimes replace the eagle claws of the hindquarters. The elongated and tubular shape of our monster's body, which from the time of the first publication raised difficulties in regard to its identification as a camel, corresponds broadly to the form of the Babylonian creature. But we must warn again that the latter, particularly on the kudurrus, often varies so much in details that it has been interpreted several times as a lizard, a bull or something else.<sup>14</sup> On the seal-impression the tail has almost totally disappeared, but from

<sup>10</sup> See H. Prinz, *Astralsymbole im altbabylonischen Kulturkreise*, Breslau, 1910, pl. xi.

<sup>11</sup> H. V. Hilprecht, *Ausgrabungen im Bel-Tempel zu Nippur*, Leipzig, 1903, p. 76, fig. 56; B. Meissner, "Grundzüge der altbabylonischen Plastik," *Der alte Orient* xv, 1915, p. 63, fig. 114; Unger, *loc. cit.*, pl. 3 a.

<sup>12</sup> See especially the numerous specimens in the British Museum, L. W. King, *Babylonian Boundary Stones and Memorial Tablets in the Brit. Mus.*, London, 1912, pls. XXI, XLIV, L, LXIV, LXV, XC, CIV, CV, etc. Cf. F. X. Steinmetzer, *Die babylonischen Kudurru (Grenzsteine) als Urkundenform* (Studien zur Geschichte und Kultur des Altertums xi, fasc. 4-5), Paderborn, 1922, pp. 163 ff.

<sup>13</sup> Heuzey, *Rev. d'assyriologie*, *loc. cit.*, pl. iv; *Les Origines orientales*, pl. vi.

<sup>14</sup> Cf. e.g. J. de Morgan, *Mémoires de la Délégation en Perse* vii, 1905, pp. 141 ff., pl. xxvi; P. Toscanne, "Études sur le serpent," *ibid.* xii, 1911, p. 195, pp. 227 f.



the stub it seems that it was long and uncoiled, as it normally appears on the Babylonian dragon.<sup>15</sup>

As for the motif of a woman riding a monster, I have already pointed out when first publishing the signet that, although it is unique among preserved Minoan monuments, it also appeared on another seal impression from Gournià, which vanished mysteriously from the Candia Museum before its publication, according to information provided me by my friend Xanthoudides, formerly *éphor* of Crete.<sup>16</sup> The motif is all the more surprising, inasmuch as it is known that, although the horse was imported into Crete almost simultaneously with its importation into Egypt, riding horseback was unknown in Crete throughout Cretan-Mycenaean civilization.<sup>17</sup> Such a scene appears timidly for the first time on the painted representation of a warrior on the cinerary crater from Moulia, belonging to the very end of the Mycenaean epoch, or rather to the Submycenaean age.<sup>18</sup> Before this time riding horseback was also unknown on the Hellenic mainland. In Egypt representations of riding figures are not found before the fourteenth century B.C., when they can be seen, infrequently, on a certain number of monuments, and especially in representations of battles of the Ramessids. It has been pointed out, however, that no Egyptian warriors are shown fighting on horseback, but probably mounted messengers, or more often isolated figures of enemies turned in flight, Asiatic foreigners and perhaps slaves, represented without weapons and almost naked,<sup>19</sup> confirming in all certainty the derivation of this custom from the neighboring lands of Asia. Here, too, however, the custom of riding horseback appears equally exceptional before Assyrian times.<sup>20</sup> On one of the above Egyptian monuments, that is, a figure of the nineteenth dynasty in the great temple of Karnak, we finally approach our theme with the image of a Syrian goddess, completely draped, who rides sidewise on a horse.<sup>21</sup> The representation of an animal or a sacred fabulous creature as a support for a divinity is, in fact, indigenous and peculiar to Mesopotamian art, as well as to any art influenced by it, such as Hittite. Particularly widespread is the motif of a divinity standing on an animal. But we have noted above (fig. 3) an example of

<sup>15</sup> The creature's tail may also vary, at least in the Assyrian age, when it appears on a Florence seal as a bird's fan-like tail: see J. Menant, *Rech. sur la glyptique orientale* ii, Paris, 1886, p. 60, fig. 52.

<sup>16</sup> In connection with this motif I also mentioned a lentoid ring-stone of the British Museum on which the Minoan goddess of animals, flanked by her two sacred animals in heraldic position, sits over a lion's head, which may be considered an abbreviation for the representation of the whole lion: see A. Evans, "Tree and Pillar Cult," *JHS.* xxi, 1901, p. 165, fig. 45; Prinz, "Bemerkungen zur altkretischen Religion," *AM.* xxxv, 1910, p. 168.

<sup>17</sup> See on this *PM.* iv, 2, London, 1935, p. 830.

<sup>18</sup> *Ibid.* iv, 1, p. 374, fig. 312 c; Doro Levi, *Arkades* (= *Annuario*, x-xii), pp. 640 ff., fig. 660 a.

<sup>19</sup> I. Rosellini, *I Monumenti dell'Egitto e della Nubia*, 2nd part, *Monumenti civili* iii, Pisa, 1836, pp. 240 ff.; C. R. Lepsius, *Denkmäler aus Ägypten und Äthiopien* vi, Abt. iii, pl. 138; F. Chabat, *op. cit.*, pp. 430 ff.; A. Erman, *op. cit.*, p. 652; W. Max Müller, *Asien und Europa*, Leipzig, 1893, p. 301, note 4. There is a wooden statuette of a horseman in the Metropolitan Museum (*BMA.* 1916, p. 85), attributed to the XVIII-XIX dynasties, but its authenticity has been questioned and at any rate it appears to be repainted.

<sup>20</sup> See B. Meissner, *Babylonien und Assyrien* i, Heidelberg, 1925, pp. 93 f.; E. Meyer, *Gesch. des Altertums* <sup>5</sup> ii, 1, Berlin, 1928, p. 44, note 3; J. Wiesner, "Fahren und Reiten in Alteuropa und im alten Orient," *Der alte Orient* xxxviii, 1939, fasc. 2-4, pp. 69 ff. On the early Hittite relief from Senjirli, cf. E. Meyer, *Reich und Kultur der Chetiter*, Berlin, 1914, p. 60, fig. 14. For further bibliography see also P. Fraccaro, s.v. *Cavalleria*, in *Enciclopedia Italiana* ix, 1931, p. 530.

<sup>21</sup> Lepsius, *op. cit.*, pl. 145.



another common motif, i.e. that of a god seated on a throne resting on the back of a sacred animal. On a cylinder in the British Museum<sup>22</sup> the throne is abolished, and the divinity sits directly on the back of a griffin with lion's head. The griffin actually replaces the throne. The divinity is much larger in proportion and sits on its back toward the tail. On an early cylinder from Susa,<sup>23</sup> on the other hand, divinities kneel on lions and other animals. But from a very early date we can also find representations of divinities actually riding on the back of the sacred animal, goddesses riding sidesaddle and gods riding astride. Already on a pre-Sargonic votive tablet in limestone<sup>24</sup> we see Nin-lil or Belit sitting on a big bird, with both legs on one side. A god rides astride a lion on a fine cylinder in red and white jasper of the Agade period in the Louvre,<sup>25</sup> while on another he rides on a bull, trampling on a subdued foe.<sup>26</sup> The motif of a divinity riding on the back of a sacred animal passed from Mesopotamian to Hittite art.<sup>27</sup>

After the publication of the H. Triada signet another representation of a similar subject was found in Cretan-Mycenaean art.<sup>28</sup> It is repeated on eight small and very worn plaques of blue glass, three of which are fragmentary, each pierced by two small holes through which the threads passed which fastened these and similar plaques to a helmet they once decorated. The finds belong to the royal tomb of Dendra, dated around the middle of the fourteenth century B.C. The representation has been so poorly understood that substantial differences are presented by the two drawings of it thus far published by Persson and Technau (fig. 7 a-b). The only certain fact is that a figure is riding rapidly to the right on the back of a quadruped. This is undoubtedly a feminine figure whose dress with *kaunakes* we seem to distinguish, and she sits on one side of the animal. It is interesting, furthermore, that the figure is seen in an attitude well known in Cretan-Mycenaean religion. It is one entirely similar to that of the figure on our seal impression which evidently escaped the attention of scholars who dealt with the later discovery. Our signet, indeed, refutes the argument that, excluding the possibility of a horse, the quadruped of the plaques must be a bull. Evidently it may also be a fantastic creature, similar to the one of our seal impression, on which a deity of fertility, the ruler of wild animals and monsters is riding. But even if it is a bull, it is obvious that our signets, as well as similar representations mentioned, support our scepticism that the Cretan-My-

<sup>22</sup> Frankfort, *op. cit.*, pl. xxvii, i.

<sup>23</sup> L. Delaporte, Mus. du Louvre, *Catal. des cylindres orientaux* i, Paris, 1920, p. 56, no. 462, pl. 45, figs. 11-12.

<sup>24</sup> H. V. Hilprecht, *Explorations in Bible Lands*, Philadelphia, 1903, fig. on p. 475; B. Meissner, *Babylonien und Assyrien* ii, Heidelberg, 1925, p. 47, fig. 17 on plates.

<sup>25</sup> Menant, *op. cit.* i, Paris, 1883, p. 79, fig. 38; Ward, *op. cit.*, p. 66, fig. 166; M. Witzel, *Der Drachenkämpfer Ninib* (Keilinschriftliche Studien ii), Fulda, 1920, pl. iii, fig. 48.

<sup>26</sup> Ward, *op. cit.*, p. 54, fig. 137 b. From the Assyrian age, with the institution of regular troops of horsemen, we find on reliefs fighters riding camels. We are therefore not surprised to see on an Achæmenid cylinder a crowned god on the back of a camel battling against a leonine demon: see *ibid.*, p. 332, fig. 1080; Frankfort, *op. cit.*, pl. xxxvii, m.

<sup>27</sup> Cf. A. H. Sayce, *The Hittites*, London, 1903, p. 121.

<sup>28</sup> A. W. Persson, *The Royal Tombs at Dendra near Midea*, Lund, 1931, p. 65, fig. 43, p. 121, pl. xxv; *idem.*, *The Religion of Greece in Prehistoric Times*, Berkeley, 1942, pp. 133 ff., fig. 24 a; R. Hampe, *Frühe griechische Sagenbilder in Bötien*, Athens, 1936, p. 68, fig. 29; W. Technau, "Die Göttin auf dem Stiere," *JdI*, lii, 1937, p. 99, fig. 12.



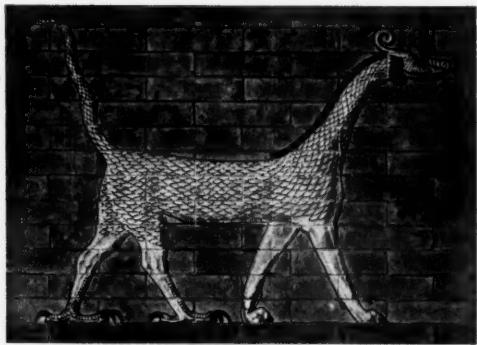


FIG. 6.—THE DRAGON, FROM THE COLORED FRIEZE  
ON THE ISHTAR GATE OF BABYLON  
(Andrae, *Die Kunst des alten Orients*, fig. on p. 490).

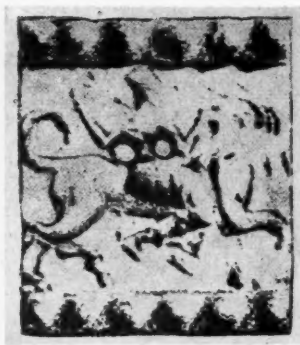


FIG. 7 A-B.—GLASS PLAQUE FROM DENDRA  
(after drawings by Persson and Technau, Persson, *Rel. of Greece in Prehis-  
Times*, p. 133, fig. 24 a. *Jdl.* lli, 1937, p. 99, fig. 12)



FIG. 8.—SEAL-IMPRESSION FROM H.  
TRIADA  
(*Annuario viii-ix*, p. 126, fig. 134)



FIG. 9.—SEAL CYLINDER IN THE HAGUE  
MUSEUM  
(Ward, *Seal Cylinders of Western Asia*, p. 43,  
fig. 110)

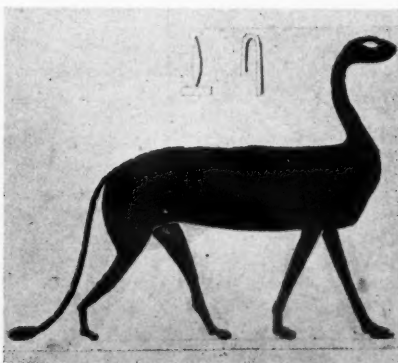


FIG. 10.—THE DRAGON OF BABYLON ON AN  
EGYPTIAN PAINTING  
(Rosellini, *Monumenti dell'Egitto e della Nubia*,  
2nd pt., *Mon. Civili* i, pl. xxiii, 2)



cenaeon monument is a pre-Hellenic representation of the myth of Europa on the bull. Indeed, among oriental models of our representation <sup>29</sup> we mentioned an image of a deity riding on a bull. Nor is the image of the Πότνια τούρων lacking among the various forms of the Πότνια θηρών in archaic Hellenic iconography. It suffices to mention the two replicas of bronze belt clasps from Crete and Kolophon on which a goddess stands between two bulls flanking her, or in a chariot drawn by them.<sup>30</sup> Rather, the opposite is confirmed: that is, that the Hellenic myth has drawn for its subject from the motifs of pre-Hellenic iconography; and that the representations of Hellenic art have derived from the former many an element entirely alien to the myth itself—having more relation with the Dionysiac cycle, with Hermes, with Poseidon, than with Zeus—or an element like Europa's wings.<sup>31</sup> Moreover, from the representation studied before, the suggestion occurs that not only Cretan-Mycenaeon imagery passed over to Greek art in the image of Europa on the bull, but that form as well as religious content persisted in the images of several special cults, where apparently the prehistoric tradition was more tenacious, sometimes coming down to the Imperial age. The goddess of vegetation riding on a subdued sacred animal or monster may be linked with images of Europa-Astarte, whom we see riding on a bull on Sidonian coins of the second century B.C., of Aphrodite-Ariadne on Cypriote coins, of Artemis Tauropolos, worshipped especially in Asia Minor, but also in Macedonia, and represented e.g. on coins of Amphipolis, as well as the cult of Aphrodite Ἐπιτράγῃα (riding on a goat), or Pandemos. In Athens the association of the latter cult with Theseus confirms its Cretan origin.<sup>32</sup>

Thus we have checked our natural tendency to identify Hellenic myths with representations of the mysterious and suggestive figured repertory of Cretan-Mycenaeon art solely on the ground of iconographic resemblances. We are likewise discouraged from recognizing, in the repertory of the latter, an image of the chimaera on another extremely worn glass plaque from the same tomb of Dendra; <sup>33</sup> of fighting centaurs on a gem from Argos,<sup>34</sup> and of the Minotaur carrying Athenian girls into captivity on a gold ring from the Agora in Athens.<sup>35</sup> Obviously this is not the place to consider at length the whole difficult problem of the possible derivation of some Hellenic myths from Minoan civilization.<sup>36</sup> The latter did not lack a divine or mythi-

<sup>29</sup> On the bull as the animal associated with the divinity in the Orient see L. Malten, "Der Stier im Kult und mythischen Bild," *JdI*. xliii, 1928, pp. 90 ff. Cf. also A. B. Cook, *Zeus* i, Cambridge, 1914, pp. 639 ff.

<sup>30</sup> C. Picard, "Πότνια τούρων," in *Mélanges Holleaux*, Paris, 1913, pp. 175 ff., fig. 1; Technau, *loc. cit.*, p. 89, fig. 10; Lehmann-Hartleben, *AJA*. xliii, 1939, pp. 669 ff. <sup>31</sup> Technau, *loc. cit.*

<sup>32</sup> Cf. Wernicke, s.v. *Artemis*, in *RE*. col. 1399 f.; L. R. Farnell, *Cults of the Greek States* ii, Oxford, 1896, pp. 451 ff., p. 633; *idem*, "Cretan Influence in Greek Religion," *Essays in Aegean Archaeology presented to Sir A. Evans*, Oxford, 1927, p. 19; M. P. Nilsson, *Griechische Feste von religiöser Bedeutung*, Leipzig, 1906, pp. 251 ff.; Cook, *Zeus* i, pp. 538 f.; Technau, *loc. cit.*, pp. 93 ff., and coins fig. 11 on p. 91; *PM*. iv, 1, pp. 45 f.

<sup>33</sup> *Royal Tombs at Dendra*, p. 65, fig. 44, pp. 122 f.; Hampe, *op. cit.*, p. 68, fig. 28. There is probably an interlacing of two separate animals, a lion and his victim.

<sup>34</sup> C. W. Blegen, *Prosymna*, Cambridge, 1937, p. 277, no. 11, pl. 145, fig. 589.

<sup>35</sup> *AJA*. xxxvii, 1933, p. 540, fig. 1; *Hesperia* iv, 1935, p. 319, fig. 7; H. T. Bossert, *Altikreta*,<sup>3</sup> Berlin, 1937, figs. 400 f.; Cook, *Zeus* iii, Cambridge, 1940, p. 1090; Persson, *Rel. of Greece*, etc., p. 101.

<sup>36</sup> See the tendency to accept identity of meaning in Minoan and Greek representations by M. P. Nilsson, *The Mycenaean Origin of Greek Mythology*, Berkeley, 1932 (see pp. 33 f. on the monuments with



cal epos, according to the evidence, e.g., of the famous gold ring from Tiryns.<sup>37</sup> Here there are two scenes, one in a boat and one on shore, with two pairs of figures, one just in front of the boat and apparently directed toward it; the other before a building indicated by a door. These scenes have been repeatedly identified with episodes of the legend of Theseus and Ariadne, which supposedly passed from Minoan to Hellenic mythology. Direct iconographic derivation has also been recognized for monuments of the geometric and early Hellenic ages, such as the cast figures on bronze bars from the cave of Zeus on Mount Ida in Crete, an Attic geometric vase, a polychrome amphora from Knossos and a cylindrical urn from Arkades.<sup>38</sup> At this point we may add in passing one more consideration in connection with our argument, suggested by two other products of Minoan glyptic art in which a boat is to be seen: <sup>39</sup> the gold ring from Mochlos,<sup>40</sup> stolen from the Candia Museum, and a seal-impression from H. Triada (fig. 8).<sup>41</sup> When publishing the latter I pointed out, aside from the probable religious meaning of the scene, the animistic effort by the artist to give to the boat the aspect of a living creature, shaping the prow and stern like a bird's head and tail. The high crest on the bird's head evoked my suggestion that the artist tried to assimilate the beak of an Aegean boat to this animal detail. But the head as a whole does not entirely resemble a bird's head, with a sharp bill. Perhaps it is not essentially different from that of the Mochlos ring, approaching rather an equine shape. Now this effort to render the living nature of animals or monsters, moving across the water, acting as boats, again calls to mind a series of early Mesopotamian seals. On these the fantastic mythological creature subdued by the divinity is transformed into a boat—still, however, clearly preserving the features of its real nature—in order to carry the divinity in his journey through the heavenly or subterranean waters.<sup>42</sup> In some cases there is a hybrid man-boat, or man-fish, in which a part of the boat is anthropomorphized, ending in a human bust holding an oar. Elsewhere, on the other hand, the monster is recognizable, transformed into a boat, its head forming the prow and its tail the stern, and the deity sails within it: e.g. Ea, or Bau, with her characteristic bird, on the cylinder of

which we are dealing); and, on the contrary, the decidedly negative attitude of G. Karo, *Die Schachtgräber von Mykenai*, Munich, 1933, p. 355.

<sup>37</sup> Bossert, fig. 400 e; Persson, *Rel. of Greece*, etc., pp. 80 ff., p. 179, fig. 25.

<sup>38</sup> See especially A. von Salis, *Theseus und Ariadne*, Berlin, 1930; *idem.*, "Neue Darstellungen griech. Sagen i. Kreta," *Sitzungsberichte der Heidelberger Akad. der Wiss.*, Phil.-hist. Kl., xxvi, 1935-36, Abh. 4.

<sup>39</sup> In fact, the gold ring with a complex scene is probably a modern forgery, *PM*, ii, p. 250, fig. 147 b; iv, p. 953, fig. 923; von Salis, *Theseus und Ariadne*, p. 13, fig. 11; Persson, *op. cit.*, pp. 81 f., p. 179, fig. 26.

<sup>40</sup> Bossert, fig. 399 b; Persson, *op. cit.*, p. 180, fig. 27.  
<sup>41</sup> "Cretule di H. Triada," pp. 126 ff., no. 118, fig. 134 and pl. viii; *PM*, iv, p. 952, fig. 920; Persson, *op. cit.*, p. 84, p. 180, fig. 28 (erroneously called "gold signet from Knossos" by Evans and Persson). We may point out in passing that careful scrutiny of the H. Triada seal impressions greatly invalidates Persson's interpretation of a series of Minoan monuments as cult scenes referring to the mortuary pithos (*op. cit.*, pp. 32 ff., 88 ff.). The roundish objects worshipped in these scenes hardly suggest the shape of a pithos, either standing or turned upside-down. On the ring in the Ashmolean Museum at Oxford, *ibid.*, p. 171, no. 1, it is only the woman's arm resting on one of these objects that confers this aspect upon it. At any rate, both the shape and the position exclude the interpretation of pithoi for similar objects on the two interesting representations of signets, "Cretule di H. Triada," p. 140, fig. 154, and p. 143, fig. 159, for which the interpretation of sacred baetyls must be accepted.

<sup>42</sup> See Ward, *op. cit.*, pp. 40 ff.; Frankfort, *op. cit.*, pp. 108 ff.; *idem.*, *Iraq* i, 1934, pp. 18 ff.



the Hague Museum (fig. 9).<sup>43</sup> The boat of the god's journey often has the curved and deep shape of the kufa used for navigation on the rivers of Mesopotamia; but it may have different shapes as well, a shape with prow and stern almost forming right angles with the bottom, and perhaps also a low and slightly bent shape similar to that found on Minoan signets.<sup>44</sup> The interpretation of these scenes is difficult, and varies, but it is probable that the Sargonic seals with boat scenes possess an idyllic character, showing the Sun-god steering his animated vessel with an oar, perhaps hinting at the travel of the sun at night through the nether world; or they may be explained as the god Sin, and thus the scene a representation of the moon sailing through the sky. From the symbols associated in these representations it is evident, furthermore, that the Sumerian god of the sun was closely related to the deity representing the generative forces of nature, which is the main character of the chief goddess of Crete. Finally, we notice that, perhaps because of a strange coincidence with the Tiryns ring, two of these scarce oriental seals with the scene of a boat also show association with a wide door in full view, indicating a building on the shore, a door before which, on a seal in the Louvre, there is a group of figures in lively conversation.<sup>45</sup>

Returning to the second of our signets from H. Triada (fig. 1b), we may question whether the presence of stalks of papyrus near the fantastic creature is meant to indicate the derivation of the scene from the Egyptian repertory. The motif of the serpent-griffin is foreign to Egypt, and was imported there from Asia only during the New Kingdom.<sup>46</sup> It is met only sporadically in Egyptian art, and is generally confined to an ornamental function, e.g. as an embroidered decoration of a dress on one of the faïence plaques from Tell-el-Yahoudiyeh of the time of Ramses III, or as decoration for jewellery, such as the gold basket painted on the tomb of the same Pharaoh or on a gold arm ring found in Cyprus which had belonged to the Egyptian prince Psar of the nineteenth dynasty. The head reveals the characteristic and distinctive element of our motif, that is, the two high horns, fairly straight. In fact, the body, while still sometimes reminding us of the forms seen on Mesopotamian kudurrus, is more often transformed into a complete feline body, with all four high legs similar to panther legs. Closest to the animal form of our seal impression is the painted image of the fabulous creature appearing, with other fantastic beings, among a host of beasts in a hunting representation in the tomb of a soldier called Roti at Beni-Hasan (fig. 10).<sup>47</sup> The body, though still essentially of tubular shape, is much thicker and further from a serpentine aspect than Mesopotamian representations. It approaches in slenderness of form and joints a feline such as a panther rising on four legs which are too high. Only the head and neck are decidedly those of

<sup>43</sup> Ward, *op. cit.*, p. 43, fig. 110; *idem*, in *Old Testament and Semitic Studies in Memory of W. R. Harper* i, Chicago, 1908, p. 365, fig. 6.

<sup>44</sup> See e.g. the greatly worn cylinder, Ward, *Seal Cylinders*, p. 42, fig. 108 a, where the prow seems to have an animal shape, turned inwards, similar to the shape on the Mochlos ring.

<sup>45</sup> Delaporte, *op. cit.* ii, Paris, 1923, p. 107, A. 125, pl. 70, 2. See also the early cylinder, less clearly distinguishable, where a door is also to be seen, *ibid.*, pl. 64, 1 (A. 31).

<sup>46</sup> H. Prinz, in *RE. loc. cit.*, col. 1904; *Transactions of the Society of Biblical Archaeology* vii, pl. II, after p. 182; M. Ohnefalsch-Richter, *Kypros, The Bible and Homer* i, London, 1893, p. 76, fig. 104; Prisse d'Avennes, *Hist. de l'art égyptien*, Paris, 1879, p. 438, Art Industriel, col. pl. 17 (sièges).

<sup>47</sup> Rosellini, *op. cit.* i, p. 219, pl. XXXIII, 2; H. Schäfer, *Von ägyptischer Kunst*, Leipzig, 1930, pl. 54, 3.



a serpent, having lost all additional elements of Mesopotamian iconography. Perhaps in this detail as well they approach more nearly the short form of the head on our second signet: but we cannot insist upon this because of the somewhat indistinct impression, on which some horizontal lines are visible beyond what now seem to be the tips of the muzzles of both creatures. Originally the heads of these two creatures may have been elongated in the same way as that of the dragon on which the woman rides on the signet (fig. 1a). In spite of the above considerations it is probable, however, that Minoan art drew the motif from its native country, where we have seen it in numerous specimens and in full vigor throughout the centuries, always clearly bound with its mythological meaning, and where, on the other hand, we also saw throughout the centuries the close association of the divinity with our monstrous creature, as well as the motifs of a divinity standing or riding on a sacred animal.<sup>48</sup> I do not believe we can admit for the period of our signets direct communication between Egypt and Crete; in my opinion, relations between the two civilizations developed through coastal navigation along the shores of Syria and Asia Minor.<sup>49</sup> But on these shores the influence of Asiatic civilizations and art was not less active and fecund than that of Egypt. The resemblance of the monster's form in Egypt and in Crete may be explained—in addition to the effect of the numerous transformations and variations pointed out in Mesopotamian art—by a similar assimilation of the composite and ill-connected forms of the original monster to forms nearer to those of natural animals. The association of the monster with papyrus stalks may merely be the combination of an exotic, fantastic being with an equally exotic landscape element.

Minoan art in the signet of a riding woman used a Mesopotamian subject with the same freedom with which it interpreted every foreign loan, according to its own spirit and its own formulas. It connected the dragon with its chief goddess, in her luxurious garments, rather than with the more usual male Mesopotamian deities.<sup>50</sup> Well experienced in similar kinds of representations because of its predilection for scenes of acrobatic exercises on the back of galloping bulls, it attained perfect proportion between the woman and her quadruped, and a well balanced rhythm in the woman's easy and adroit position. Her arms were probably given a ritual gesture peculiar to Cretan religion. Here Minoan art achieved one of its most graceful and spirited compositions in the religious repertory with fantastic representations left us by the glyptic art of prehistoric civilizations.

## 2. THE SIREN FROM PRAISOS

Emil Kunze has recently traced a sketchy history, in the light of recent discoveries, of the image of the strange fantastic creature with a bird's body and a human head to which Greek legend gave the name of siren.<sup>51</sup> In this sketch he reserves a

<sup>48</sup> Nor is the motif of a riding divinity foreign to Egyptian art. We may mention e.g. the Egyptian design on papyrus showing the Moon God riding a cow, Maltén, *loc. cit.*, in *JdI.* xliii, 1928, p. 96, fig. 8; Persson, *op. cit.*, p. 133, fig. 24 b.

<sup>49</sup> See the opposite contention in Dussaud, "Rapports entre la Crète ancienne et la Babylonie," *Iraq* vi, 1939, pp. 53 ff.

<sup>50</sup> In Mesopotamia, however, the monster may be in the service of a female divinity. Cf. e.g. Ward, *Old Testament and Semitic Studies*, *loc. cit.* i, p. 372, fig. 15.

<sup>51</sup> "Sirenen," *AM.* lvii, 1932, pp. 124 ff.; for the fragment of Praisos, pp. 135 ff.; for the new dating proposed by Kunze, cf. p. 141. See also Kunze, *Kretische Bronzereliefs*, Stuttgart, 1931, p. 41, note 12.



special place for the representation painted on a fragment of a large vase from Praisos (fig. 11). He considers it the only image of a siren left by late Mycenaean or Submycenaean art, to be dated not later than the first half of the eleventh century B.C., classified between the images of ancient Egypt and those of Hellenic art. Thus he rejects the current attribution of the Praisos fragment to the early Hellenic art of Crete—a work of orientalizing art. This was the opinion of its discoverer, and one in which I agree,<sup>51</sup> though underlining, in contrast to preceding scholars, the extremely early character of the representation as against all similar images left by Greek art. According to Kunze, the attribution of this Cretan vase to Hellenic art, established by excavation data,<sup>52</sup> is contradicted by its intrinsic characteristics, that is, by the shape of the vase, as well as by the style of its decoration. Let us examine his contention in detail.

As far as the shape of the vase is concerned, the fragment enables us to determine only the outline of a spacious, almost cylindrical urn with two kalathos handles flattened against the body and reaching to the lower edge of the fragment. The handles probably rose almost to the rim of the vase, which could not be very far from the upper edge of the fragment. In fact, a band of color runs near this edge on the inner surface, otherwise unvarnished—a band such as is seen near the rim of many similar Cretan vases. I have sketched elsewhere<sup>53</sup> the evident history of this shape of cylindrical urn, undoubtedly derived from the Mycenaean cylindrical pyxis with two stirrup-shaped handles protruding over the angular shoulder and continuing in relief along the body of the vase; in the latter shape the shoulder narrows toward the low vertical rim, which supported a lid.<sup>54</sup> During the Mycenaean age the vase tended to increase in height and to prolong the handles in relief almost to the base.<sup>55</sup> In Crete we can follow this shape throughout the Submycenaean, Proto-geometric and Geometric styles in specimens from Moulianà, Erganos, Vrokastro, Kavousi, and Knossos.<sup>56</sup> The accentuation of the high and slender shape is often matched by the narrowing of the base, as well as by a tendency toward a barrel shape, which was perhaps derived by our class of vases from another kind of Minoan vase, related to the former but having different handles. The handles of our urns

<sup>51</sup> Droop, *BSA*, xii, 1905–06, pp. 41 f.; *Arkades*, pp. 528 f., 608.

<sup>52</sup> The fragment was found among remains testifying to a cult before an open altar or in a small temenos on the bare top of a hillock, called the Altar-hill (or third acropolis) by the excavator. All remains seem to circumscribe with fair approximation the persistence of the cult between the eighth and the fifth centuries B.C. They include figured terracottas, vases, votive bronzes, fragments of bronze tripods and so on. See Halbherr, *AJA*, v, 1901, p. 380; Bosanquet, *BSA*, viii, 1901–02, p. 256. The only object found on the hill which according to Bosanquet (*loc. cit.*, note 1) might be earlier than Greek times is a steatite bowl, “probably of Mycenaean date,” examples of which were seen by that scholar still in use as church lamps. The shape of the bowl is not described more exactly, and it may well have been a post-Mycenaean object, similar e.g. to many steatite objects found at Arkades: see *Arkades*, p. 47, fig. 27.

<sup>53</sup> *Arkades*, p. 486.

<sup>54</sup> Furtwängler, Löschke, *Mykenische Vasen*, form 108, pl. XLIV, cf. pl. XVI, 104.

<sup>55</sup> Cf. the vase from Phaistos, *MonAnt.*, xii, 1902, col. 117, fig. 46.

<sup>56</sup> Ep. 1904, pl. III, 2; *AJA*, v, 1901, pl. VI, 4; E. H. Hall, *Excavations in Eastern Crete, Vrokastro* (Univ. of Pennsylvania, Anthropological Publications iii, no. 3), Philadelphia, 1914, p. 162, fig. 18; p. 106, fig. 60 C; pl. XXX = E. Pfuhl, *MuZ.*, Munich, 1923, fig. 33 = Doro Levi, *Early Hellenic Pottery of Crete* (*Hesperia* xiv, 1945), pl. I, 1; *Arkades*, p. 587, fig. 633; *AM*, xxii, 1897, p. 236, fig. 4; *AA*, xlviii, 1933, col. 307, fig. 19 = *Early Hellenic Pottery of Crete*, pl. II, 1–2.



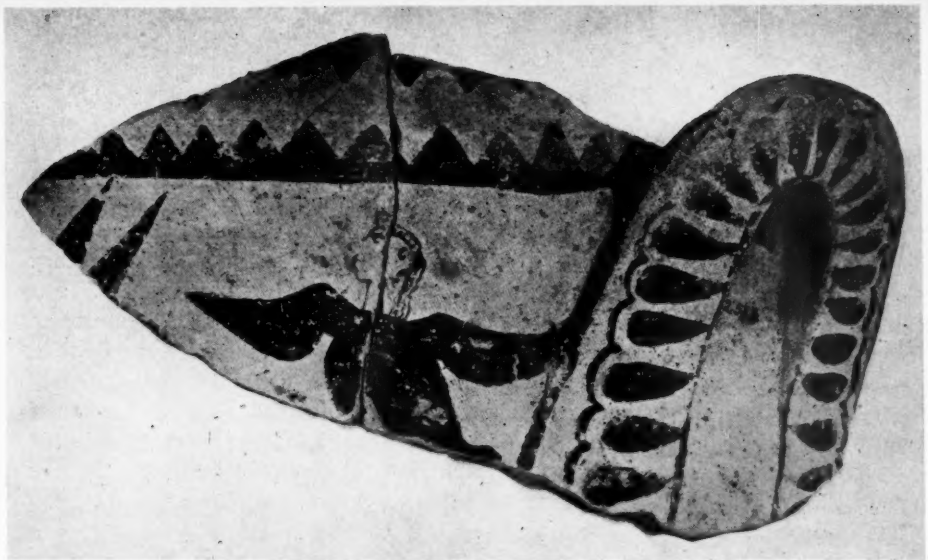


FIG. 11.—FRAGMENT OF VASE FROM PRAISOS  
(*A.M.* lvii, 1932, Beil. xxxii)



FIG. 12.—BRONZE PLAQUE FROM  
ARKADES  
(*Annuario* x-xii, p. 28, fig. 8)



FIG. 13.—TERRACOTTA HEAD FROM SPARTA  
(*BSA.* xxix, 1927-28, pl. i, a-b)



FIG. 14.—TERRACOTTA HEAD FROM  
PRAISOS  
(*AJA.* v, 1901, pl. xi, 1, a-b)



also vary between vertical and slightly oblique positions. The shoulder is slightly curved, and the mouth of the vase becomes larger.<sup>57</sup> These changes, together with the increase in height, lead to the better individualized category of the "situla," of which many specimens have been found, especially at Arkades. This was a shape cherished in Crete, but also found in geometric and orientalizing ceramics of the surrounding Aegean world.<sup>58</sup> Its increasing slenderness is usually enhanced by high and detached handles; in some still severe specimens, however, we find the handles merely protruding above the angle of the shoulder.<sup>59</sup> If we try more precisely to classify the Praisos fragment within the above evolution of our ceramic shape, we may say that, as a whole, it approaches more closely than any other vase the cylindrical urn from Vrokastro, just mentioned. The latter, however, with its severe decoration of geometric patterns, should in no way be called Late Mycenaean, but decidedly Protogeometric. In this specimen the size and width of the vase, as well as the vertical body and the beginning of the handles near the corner of the shoulder correspond with our fragment.<sup>60</sup> As for the relief part of the handles, we cannot establish from our fragment whether it reached the bottom of the vase, as on the Vrokastro urn, or ended before. The fragment does not, in fact, extend to the base of the principal decorative area, which is usually reached by the handles both in the urns with figured and in those with geometric decoration.<sup>61</sup>

With regard to the decoration, Kunze states that the syntax is not Greek because

<sup>57</sup> We are not, like Kunze, able to trace a clear distinction between the pyxis and the cylindrical urn. The "pyxis" from Moulia is higher (m. 0.33) than the cylindrical urn from Phaistos (m. 0.265). As for the shape, only the rim of the former re-enters more, perhaps again because of its more oblique form. We may omit the consideration of other vases cited by Kunze, which differ in number, shape and attachment of handles, which form perhaps the distinctive element of our category, although these different types may have contributed to the development of the cylindrical vase from the class of pyxides. The vase from Pseira (Maraghiannis, *Antiquités Crétoises* ii, pl. 21, 1), has three handles, a number often found in Minoan vases, such as alabaster, but which disappears in Greek pottery. The vase from Palaikastro (*Palaikastro Excavations* i [BSA. Suppl. Paper 1] London, 1923, pl. xxiii, c), cylindrical, slightly barrel-shaped, has four ribbon handles, two vertical and two horizontal, like the ovoid vases, *ibid.*, pl. xxiii a-b, and the coarser specimen, p. 98, fig. 82. From this was derived the arrangement of the handles of a large category of ovoid urns at Arkades (see *Arkades*, p. 481, Table of forms, fig. 592 A, 3 a). The Mycenaean barrel shape, pl. xxiii a, is more closely connected with the category, so common at Arkades, of cylindrical urns with horizontal handles, *ibid.*, fig. 592 A, 5, p. 484 ff., rather than with our shape. This is also a shape of Late Minoan origin, which has left numerous specimens, particularly in coarse ware, fitted into the pavements of the palaces for collecting rain water. Many fragments in the court of Phaistos bear witness to this use. Other specimens were painted and decorated. We may mention among these a fine unpublished jar from Hierapetra, decorated with a broad central band of manifold squares, and with manifold angles inscribed in the two series of triangles resulting between the central band and the edges of the vase.

<sup>58</sup> Kunze, *Kretische Bronzereliefs*, p. 41. The shape is so characteristic for Cretan pottery, that a specimen of it is the only vase in geometric Cretan ceramics imported to Sicily. This is the vase from Gela, *MonAnt.* xvii, 1906, pl. v. Cf. Doro Levi, "Tracce della civiltà micenea in Sicilia," in *Paolo Orsi*, Suppl. to *Archivio stor. per la Calabria e la Lucania* vi, 1935, p. 107, fig. 1.

<sup>59</sup> See e.g. *Arkades*, p. 153, fig. 156.

<sup>60</sup> Kunze's comparison with the attachment of the handles in the Palaikastro pithos (*Palaikastro Excavations* i, p. 42, fig. 30), is not a convincing one. In the latter it is a question of a handle peculiar to Minoan pottery, with a horizontal slab departing from the rim to meet the oblique kalathos handle.

<sup>61</sup> We may quote from many examples the urn with a figure representation from a tomb of Fortezza near Knossos, *AA. loc. cit.* = *Early Hell. Pottery of Crete*, pl. ii, 1-2; those with geometric decoration, *Arkades*, p. 153, fig. 156; *AM.* xxii, 1897, p. 236, fig. 4, etc.



of its loose construction,<sup>62</sup> which can be noticed even in the "immediate, transitionless passage from the figured to the ornamental area." I cannot grasp the exact meaning of these words. In a large number of vases from Arkades the figured area begins immediately under the rim or the neck of the vase, and rests on an ornamental dado. But specimens are not lacking in which we find a thin band of geometric decoration under the rim, and the figured area below, as on our fragment; or a high figured area enclosed between a large collar on the neck of a jug, and a high calyx of leaves on the foot.<sup>63</sup> On the Arkades pottery we may find, moreover, a loose transition on the figured area itself from the figures to decorative elements. We may mention a cylindrical urn on which the garments of a woman, standing on a pedestal, touch the edge of a decorative pattern with two ribbons emerging from a kind of palmette.<sup>64</sup> On the other hand, the clear geometric arrangement of a broad figured area between rectilinear decorative bands, with the figures framed, furthermore, by the nearby rim of the vase, is peculiarly Hellenic, and already far removed from the manner of Minoan composition.

With regard to the two decorative elements preserved on the Praisos fragment, Kunze finds that the band of zigzag is closer to Minoan than Greek spirit in its "large, pictorial execution," in which color and clay background are subordinated to the common effect. The comparisons he adduces, however, are all entirely different from our element, except for the fragment from Palaikastro which he reproduces, but the origin and date of which are unknown. His comparisons include the wavy bands of late Minoan art, like those decorating the rims of Cretan larnakes: wavy lines which indeed contain in embryo the curvilinear, free, irregular manner of Minoan art, as opposed to the angularity and geometric exactness of Greek art. In the same way the pattern of hatched triangles decorating the shoulders of Late Mycenaean amphoras has nothing to do with our pattern.<sup>65</sup> It is true, however, that the zigzag appears in Cretan art, where it indeed extends as far back as the neolithic age, and is found again in early Minoan art in the tholos of H. Triada, and later in paintings from Psira.<sup>66</sup> Some gold plaques, which covered sword scabbards, indeed foreshadow the aspect of the metal decoration of the Rethymno and Axòs mitras, with the accentuation of the broad and smooth zigzag band matched, however, by the striation of the two series of resulting triangles. Notwithstanding, we may say that the zigzag pattern in itself scores its triumph in the geometric age, both in narrow bands and in broad ones, as on our fragment. It was particularly favored in Crete, where we find it in every category of art: it is almost unfailing on the large pithoi decorated

<sup>62</sup> On the loose syntax persisting in the ceramic decoration of Crete side by side with geometric figures see *Arkades*, p. 592.

<sup>63</sup> We may mention a few examples seen on the plates of *Early Hell. Pottery of Crete*: the jug with rampant lions, pl. xv, 2; the urn with bird-griffins, pl. xi, 2, and the oinochoe with pegasi, pl. xiv, 3. *Arkades*, p. 402, fig. 518 a = *Early Hell. Pottery of Crete*, pl. ix, 1.

<sup>64</sup> The pattern on the rim of the Copenhagen kylix, *CVA. Denmark*, fasc. 2, pl. 53, 5, is again a different one. It is a band of saw teeth, a pattern which also passed directly from the Mycenaean to the Protogeometric and Geometric repertory of Crete. We find it in the same position near the rim of a cup from Praisos: see *BSA*, viii, 1901-02, p. 242, fig. 10 = Pfuhl, *op. cit.*, fig. 34, around the bottom of a jug from Arkades; also *Arkades*, p. 220, fig. 247 = *Early Hell. Pottery of Crete*, pl. xiii, 4, and as the principal element on the body of a vase, such as the vase from Kourtes, *Arkades*, p. 559, fig. 616.

<sup>65</sup> Cf. *Arkades*, p. 510; Doro Levi, "I bronzi di Axòs," *Annuario XIII-XIV*, p. 93; R. B. Seager, *Excavations on the Island of Psira* (Univ. of Pennsylvania, Anthropol. Publications iii, 1), Philadelphia, 1910, pl. xv.



in relief, and it is found on the rings of bronze tripods, on elements of architecture, on vase decoration.<sup>67</sup>

The pattern on the handle of our fragment very definitely reveals its Minoan derivation, according to Kunze, since no Greek monument of Crete would show the old branch pattern. This statement sounds very strange indeed, since in the Cretan geometric style there is the greatest abundance of motifs derived from the various types of pre-Hellenic branch patterns. Omitting the more stylized forms, tending to the schematical fishbone pattern or the two series of spirals, it will be enough to recall the branches with two regularly opposed series of laurel leaves on two polychrome urns from Knossos, on one of which the introduction of birds by the artist aims at a naturalistic revival of a vegetable element.<sup>68</sup> We must admit that there is in these branches a geometrization of a more realistic form, with pear-shaped leaves hanging more naturally from the stem, as we see them e.g. on the fine cup from the fourth Shaft grave at Mycenae.<sup>69</sup> The same form also appears in Crete—e.g. on a fine amphora from Knossos with architectural decoration<sup>70</sup>—where, however, another slightly more stylized kind of branch can also be found,<sup>71</sup> ultimately derived from the branches of the finest naturalistic Minoan style.<sup>72</sup> But we object to calling the pattern on the Praisos fragment a branch-pattern. We have only a foliate band, with drop-shaped leaves running in a ring around the inner edge of the handle. Foliate bands were used in Minoan and Mycenaean art for collar bands, on rims and in similar functions on metalwork and painted pottery,<sup>73</sup> alternating with lobed or tongue bands. Whatever the origin of this pattern in Hellenic art may be, however, it is certain that it spread with the greatest exuberance in the Orientalizing period, expanding not only to the neck collar of vases, but to calyces around the foot, forming roses in the center of lids or around their knobs, drawing palmettes or pendants under the necks of vases. It is usually found in circular or curvilinear arrangement, but sometimes in straight lines.<sup>74</sup> On the magnificent Minoan bronze bowl from

<sup>67</sup> *Arkades*, p. 450. For the date of the bronze tripods, cf. *BSA.* xxxv, 1934–35, p. 56; xl, 1939–40, p. 51. In the relief pithoi the zigzag band is enhanced by means of plastic relief, color, and incision. Sometimes it is very broad (e.g. on the pithos from Kasteli of Pediada, *Arkades*, p. 74, fig. 51 = *Early Hell. Pottery of Crete*, pp. xxx, 1). The pattern is merely incised on a clay dipper, *Kavousi*, p. 151, fig. 90. It may also be used as an all-over pattern on whole panels of painted vases, as on the polychrome urn from Knossos, *Arkades*, p. 598 f., figs. 642 a–b = *BSA.* xxix, 1927–28, pls. xvii–xix.

<sup>68</sup> For the motif of the stylized branch cf. *Arkades*, pp. 508, 513, 520; *BSA.* xxix, 1927–28, pl. xi, 7–8. On the polychrome urn see *ibid.*, p. 254, pls. xiii, 3, xiv, xvi = *Early Hell. Pottery of Crete*, pl. viii.

<sup>69</sup> Karo, *Schachtgräber*, pl. cx.

<sup>70</sup> Evans, *The Prehistoric Tombs of Knossos* (reprint from *Archaeologia* lix, 1906), p. 159, fig. 144.

<sup>71</sup> E.g. on a cup from Palaikastro, *BSA.* xl, 1939–40, pl. 15 t. Cf. the jug from Mycenae, Karo, *op. cit.*, pl. clxvi, 156.

<sup>72</sup> Cf. e.g. the amphora with bulls' heads from Pseira, Seager, *op. cit.*, pl. vii. However, in Crete, in late Mycenaean art, the schematization derived from another type of naturalistic Minoan branch, perhaps imitating a palm branch, occurs more frequently: cf. e.g. the vases from Pseira, *ibid.*, p. 22, fig. 6; p. 33, fig. 14, and the fragment from Knossos, *BSA.* xxix, 1927–28, p. 285, fig. 36 = *ibid.*, xxxi, 1930–31, pl. xix, 9; compare also the same transformation at Mycenae, Furtwängler, Löschcke, *op. cit.*, pl. xix, 135, and pl. xvi, 104. This motif will lead to the fish-bone geometric schematization. It can already be seen in the latter aspect on the Submycenaean crater from Moulianà, 'Eφ., 1904, pl. 3, 1 = *Arkades*, p. 641, fig. 660 b.

<sup>73</sup> On this pattern see *Arkades*, p. 456. We may add to the bibliography, in connection with metalwork, Karo, *op. cit.*, pl. cvi, 212. For ceramics cf. Furtwängler, Löschcke, *op. cit.*, pl. xxxiv, 344.

<sup>74</sup> Cf. the sherd, *BSA.* xxxi, 1930–31, pl. xviii, 5.



Knossos,<sup>75</sup> in addition to a foliate band on the rim, two bands run along the handle on both sides of the middle rib, again recalling the branch-pattern. But on our Praisos fragment the fine oblique trend of the leaves, naturalistically curved, typical of Minoan art,<sup>76</sup> has given way to a straight, regular outline more characteristic of Hellenic decoration.<sup>77</sup> The single uninterrupted series of small arches, completely detached from the leaves and following their outer edges, favors the assimilation or the casual alternation of this pattern with similar lobe or tongue patterns, which were also framed by a series of arches from Late Mycenaean and Submycenaean days, e.g. on the larnax from Milatos.<sup>78</sup> A series of arches also surrounds a rosette of similar leaves—one of the most widespread decorations of *calotte*-shaped lids in Cretan geometric pottery, and very often found at Arkades.<sup>79</sup> Both in the decoration of the painted and relief pottery of this period a lobed band often contains in the lobes a series of drop-shaped leaves.<sup>80</sup>

By far the most important argument for the attribution of the Praisos fragment to Late Minoan art is the style of the figure of the siren itself. The fairly well preserved image of this fantastic being has the entire body painted in silhouette, with fluttering wings completely open, and the head only outlined. In the profile of the female head the loose, open structure of the face has been noted, with its fluid rhythm, vague features, retroussé nose, and receding chin, which are characteristic of the canon of Minoan art. Completely opposed to this is the canon of Greek art, with a geometric, closed structure, a nose with straight outline and a horizontal lower edge, a tendency to set horizontally eye, mouth and chin, the mouth and lips being strongly marked and the chin solid and protruding.<sup>81</sup> The better to emphasize his point of view, Kunze reproduced for comparison with the siren head, on the one hand, the Minoan head from the fresco of the so-called Parisienne, and on the other, two early Hellenic heads from Crete, one from the Arkades jug of Theseus and Ariadne, and the head of a hunter carrying a wild goat on his shoulder, from a bronze open work plaque in the Louvre.<sup>82</sup> He contends that the Praisos siren can represent

<sup>75</sup> *PM*, ii, 2, pp. 638 f., figs. 402–04. For the Greek age we seem to recognize a foliate band—diminutive in comparison with that of our Praisos fragment—again on similar handles on a hydria from Praisos: see *BSA*, viii, 1901–02, pl. ix b. Similar small handles are often decorated by simple rows of strokes. The bronze bowl from Knossos recalls, in the exquisite floral decoration of its handles, the cup from Fortezza (*Early Hell. Pottery of Crete*, pl. xxi, 4–6). The handle of the latter also has a plastic decoration with a lotus flower rising on its stem between two bands of painted guilloche.

<sup>76</sup> The same trend can be seen in the foliate band used as the neck-collar of painted vases: cf. the stirrup amphora from Knossos, Evans, *Prehistoric Tombs of Knossos*, p. 74, fig. 83; p. 121, fig. 115; the amphoras, *ibid.*, pls. c–ci, fig. 143, etc. On many of these Minoan vases we do not have the single series of uninterrupted arches framing the edges of the leaves, but a whole panel with a similar series under the foliate band.

<sup>77</sup> Among innumerable examples on the plates of *Early Hell. Pottery of Crete*: pls. viii; xi, 1; xiii, 1, 3; xviii, 4, 5; xix, 1–4; xxii, 1, 2; xxiii, 2 (pyxis with relief decoration); xxv. See furthermore a foliate band around the pedestal of a kothon, *Arkades*, p. 215, fig. 240.

<sup>78</sup> See e.g. *ibid.*, p. 423, fig. 563, and the similar sherds, p. 434, fig. 581; p. 552, fig. 614. A twofold series of arches is seen around the collar of the aryballos, *Early Hell. Pottery of Crete*, pl. xx, 3.

<sup>79</sup> See e.g. *ibid.*, pl. xix, 3; *AJA*, v, 1901, pl. xiii, 8.

<sup>80</sup> See my thorough examination of this question, including all Cretan monuments that we shall refer to below, as well as many others, in "Bronzi di Axòs," pp. 128 ff., 140.

<sup>81</sup> *Arkades*, pl. xxiii = *Early Hell. Pottery of Crete*, pl. xvi; M. Collignon, *Hist. de la sculpture grecque* i, p. 99, fig. 49 = W. Lamb, *Greek and Roman Bronzes*, New York, 1929, pl. xix.



only a unique and unexpected apparition in Cretan pottery with its free and joyous Minoan figure painting, which finds a correspondence solely in the decoration of the large surfaces of late Cretan larnakes. It is true that these important products of declining Minoan art still lack an exhaustive study, but a short sketch already at hand, though incomplete and provisory, enables us to acquire a fairly clear idea of the manner of representation of the human figure, and the figure style as a whole, through the last phase of pre-Hellenic art and the beginning of Hellenic art. As far as we know, the human figure is not used in the decoration of Minoan pottery until its very decline.<sup>83</sup> On the larnax from Milatos, mentioned above, a silhouette in dull color is employed both for body and head. The drawing is quite primitive, with a fusiform mass for the body, shapeless appendices for legs and arms, and a roundish head ending with a kind of bird's bill in front. The same practice is found in depicting animals and monsters on the larnakes, except that sometimes within the silhouette some detail is reserved in the clay background. Thus an angular, very large eye is reserved in the center of the griffin's head on the Palaikastro larnax, a head very similar in shape to the human head from Milatos. An area is reserved in the middle of the bull's muzzle on the larnax from Episkopi, near Hierapetra, the huge round eye of which is indicated only by means of incision. Incision and white rings indicate the round eyes of the animals on the larnax from Gournià. Here, however, while one animal is rendered in full silhouette, the second has the body drawn in very thick outline, the central part being left for an ornamental net pattern. A huge round eye fills practically the entire head of the griffin on the crater from Palaikastro — except for the muzzle. The human figures on the crater from Moulianà, also mentioned earlier, again present this large round reserved eye, occupying most of the head, but the silhouette bodies have angular, dry outlines, contrasting with the curvilinear representation of the human body on the larnax from Milatos. The dotted outlines of the animals and the thread-like extremities of all figures on the crater recall the style of the well known vase fragment with a hunting scene from Tiryns.<sup>84</sup> We recognize this technique again in the representation of the human figure in free action at the dawn of the Hellenic age. On a hydria from the tholos of Skouriasmenos at Kavousi<sup>85</sup> the human figures — both the man, who is probably nude, and the draped woman — are completely rendered in silhouette. Their eyes are still very large, but are indicated only by incision, while the horse's eye is reserved. Even earlier, however, on another hydria from Kavousi,<sup>86</sup> the animals are drawn in thick outlines, their shapeless bodies being filled in with ornamental patterns. In the religious scene on a pithos lid from Knossos,<sup>87</sup> to which we will return later, the man's body is in silhouette, while the head is either outlined with thick contour lines, or filled, for the most part, by a large reserved eye, within which a dot seems to indicate a huge pupil. This form of head, as well as the triangular shape of the bust, strongly recalls the few fragments of Cretan geometric pottery on which the human

<sup>83</sup> *Arkades*, pp. 604 ff., 643, 651. On the larnakes, see pp. 633 ff. Only an unsatisfactory reproduction is available for the recently discovered larnax from Nirou Khani: see *AA.* xlix, 1934, col. 247, fig. 1.

<sup>84</sup> Bossert, *Altkreta*,<sup>3</sup> fig. 136.

<sup>85</sup> *Arkades*, pp. 605 ff., figs. 644 a-c = *Early Hell. Pottery of Crete*, pl. v.

<sup>86</sup> *Arkades*, pp. 600 ff., figs. 643 a-c = *Early Hell. Pottery of Crete*, pl. iii, 1.

<sup>87</sup> *AA.* xlviii, 1933, col. 309, figs. 20-21 = *Early Hell. Pottery of Crete*, pl. xxviii, 3.



figure is constrained in an abstract geometrical scheme, and arranged in ornamental friezes, according to the style of Dipylon ceramics.<sup>88</sup> On the polychrome urn from Knossos with human figures, the warrior is rendered in silhouette, while the woman's body, conceived as draped, is left blank, having only a simple decorative pattern introduced within it, and her bust and head are drawn in thick outlines.<sup>89</sup> The goddess on the almost cylindrical urn from Knossos, mentioned above,<sup>90</sup> has the entire body, geometrical in outline, filled with ornamental patterns. Her head is outlined, and her neck and arms are segmented. On another urn from Arkades, mentioned previously, with a pair of human beings, the nude man still has the body in silhouette and the head outlined, while the woman, draped in a long tunic, has thick contour lines, together with a fully varnished, uplifted arm. The sphinx on a fragment of a pithos from Knossos,<sup>91</sup> with a body of very primitive aspect resting on extremely long legs in silhouette, has an outlined head showing, however, a clearly Hellenic structure, though it still looks uncertain and experimental. We need follow no further the representation of sphinxes, by now of perfect and enduring Hellenic form, in which the complete silhouette technique alternates with the silhouette of the body and the outlined head.<sup>92</sup> Nor shall we examine the other figure representations from Arkades in the different technique of a white silhouette with superimposed colored details. Finally, on the jug with representation of Theseus and Ariadne, the silhouette technique, as well as its substitute of thick outlines, is entirely abandoned.

Passing to the profile of the faces, we find that many of the above examples show such rudimentary outlines that they can be related neither to the Minoan nor Greek canon, but rather to the geometric schematization of the human head. The Hellenic canon is far from being attained in the shapeless head of the goddess of the urn from Knossos.<sup>93</sup> Other representations show a still uncertain form, such as e.g. the faces of the women on the hydria from Skouriasmenos, as well as those of the cylindrical urn from Arkades with the master of the sphinxes.<sup>94</sup> The noses have a rising tip, the roundish chin is slightly receding, the huge eye is set somewhat obliquely near the edge of the head. The faces on the Arkades urn with representation of two walking figures already have an energetic appearance and aquiline noses corresponding to representations in Hellenic art. However, the drawing is still in a quite initial, coarse stage, like a first and still unconscious attempt looking toward a future ideal, even more evident than on the fragment of an amphora from Delos, examined by Kunze.<sup>94</sup>

We will extend our comparisons to other branches of art to show more clearly the wavering in rendering of the human countenance in the earliest Hellenic monuments

<sup>88</sup> See *Vrokaströ*, p. 98, fig. 53. For the schematization of the human figure in geometric decoration see furthermore the peculiar small amphora from Adromyloi, *BSA*, xii, 1905-06, p. 47, fig. 24.

<sup>89</sup> *Arkades*, p. 611, fig. 645 c = *Early Hell. Pottery of Crete*, pl. viii, 1. We have seen that here it is merely a question of a painting device outlining the figures, and therefore we cannot accept Payne's suggestion that the woman is represented with bosom bare, preserving the ancient Minoan fashion: cf. *BSA*, xxix, 1927-28, pp. 240, 286 ff.; and A. von Salis, *Neue Darstellungen griech. Sagen*, loc. cit., p. 43.

<sup>90</sup> *AA*, xlviii, 1933, col. 307, fig. 19 = *Early Hell. Pottery of Crete*, pl. ii, 1-2.

<sup>91</sup> *CVA*, Great Britain, fasc. 9, Oxford, fasc. 2, II A, pl. 1, 9; *BSA*, xxxi, 1930-31, p. 99, fig. 28, 2.

<sup>92</sup> *Early Hell. Pottery of Crete*, pls. xi, 2; xx, 3-4.

<sup>93</sup> *Arkades*, pp. 101 ff., figs. 76 a-c = *Early Hell. Pottery of Crete*, pl. x, 1.

<sup>94</sup> *AM*, lvii, 1932, pl. v, 5.



of the island. With the numerous sphinxes on Cretan pithoi with relief decoration in which the Hellenic structure of the face is well determined, we may contrast others in which the form is, on the contrary, still indeterminate, such as those on the admirable pithos from Kasteli of Pediada, as well as that on a fragment from Knossos.<sup>95</sup>

A more convincing confirmation is provided by the category of bronze plaques, in many respects akin to ceramic painting. Kunze also resorted to this comparison. An exquisite youthful figure with winged sandals on an open work plaque found at Arkades (fig. 12, p. 282), recalls, in its strange attitude, the Cretan myth of Ikaros.<sup>96</sup> I do not believe there can be any doubt that the artistic technique, as well as the aspect of the figure and the rendering of the decorative elements, such as the lobed band at the bottom, proves this a work of Hellenic art, and places it in a small group of similar objects from Crete, no one of which is later than the archaic age. But if we follow Kunze's method and put the head of this plaque between those of the Praisos siren and the hunter in the Louvre, its outline immediately associates it with the former, because of its fluid lines, its retroussé nose, its receding chin. The lack of marking for the lips, as well as the coiffure, is also similar. The figures on moulded bronze bars from the Idaean cave confirm the belief that the Hellenic type of face had not yet imposed itself at the beginning of Hellenic art. This canon is not encountered in the only head of this category not marked by the completely schematic outline of the geometric style.<sup>97</sup> But we must proceed further, to observe that even on the Rethymno mitra the shape of the heads still fluctuates, is still in the process of formation.<sup>98</sup>

This late emergence in Crète of the Hellenic canon of the human countenance is obvious, after all, from Kunze's own valuable work on the orientalizing bronzes of the island. In them the orientalizing current of art manifests itself in all clarity, as a direct imitation of Phoenician models, lasting from the end of the ninth to the beginning of the seventh century. The countenance of Semitic origin at first reveals itself clearly, and evident signs of this origin persist throughout the evolution of this category, in spite of a slow and increasingly decided transformation due to the influence of diverging conceptions and ideals of Greek interpreters. Only a single small fragment<sup>99</sup> is entirely separated from the whole compact group of these products. Suddenly the Hellenic facial structure appears, but still dry, angular, with aquiline nose—the whole similar to the rudimentary images on painted pottery. It is an

<sup>95</sup> *Arkades*, p. 74, fig. 51 = *Early Hell. Pottery of Crete*, pl. xxx, 1; *Arkades*, p. 68, fig. 47 c.

<sup>96</sup> *Arkades*, p. 28 ff., fig. 8. The strange and hardly understandable attitude of the ephebe shows, in association with other monuments, that the formula of flight worked out by Greek art did not impose itself, fully formed, once and for all (see Kunze, *loc. cit.*, p. 137). A flying position not very different from that of the siren, but with half-closed wings, also in front view, is that of the master of the sphinxes on the Arkades urn mentioned above, note 44. The kneeling position expressing flight is still in a stage of formation. For the different representations of flying birds and hippocgriffs in the orientalizing art of Crete see *Arkades*, pp. 459, 528.

<sup>97</sup> Halbherr and Orsi, "I bronzi dell'Antro Ideo," *Museo it. di antichità classiche* ii, 1888, Atlas, pl. xi, 7.

<sup>98</sup> Cf. "I bronzi di Axòs," p. 187, fig. 35. In many a figure, such as the one to the right of the central pillar, we may notice the slightly retroussé shape of the nose, with curvilinear outline, as well as the receding chin, contrasting with the Greek countenance showing a rectangular outline of the chin and a horizontal line of the lower jaw.

<sup>99</sup> Kunze, *Kretische Bronzereliefs*, p. 33, no. 76, pl. 37.



obvious deduction that toward the beginning of the seventh century the canon of the Hellenic countenance had not yet been evolved. Otherwise it could not have failed to make its appearance, more or less decidedly, on some representations from the Idaean cave, at least among those furthest removed from Phoenician influence. A lingering reminder of the Oriental canon, transformed by the influence of the Hellenic spirit but not yet into Hellenic form, can still be seen in the plastic structure of the female head on the neck of the well known aryballos in Berlin. It is associated here with an advanced manifestation of the geometric-orientalizing style in the painted decoration on the body of the vase. The same canon persists in the plastic head from the cave of Psychrò, in Oxford, which in all probability also belonged to a vase.<sup>100</sup>

Clay plastic art, completely in the round — which should definitely cut the knot of our dispute — also lacks a thorough and concise study, as far as the latest Minoan phase is concerned. The interesting idols from Gazi, a short distance west of Candia, have recently joined the scanty material gathered by me to sketch this phase of art. In connection with the classification of the monuments of early Hellenic plastic art in clay, my comprehensive essay, including the publication of the terracottas from Axòs, was interrupted first by the fire in the Canea Museum and then by the war. Notwithstanding, from the few accessible monuments, it appears that the human countenance reflecting Minoan art, such as that of the mask from the Psychrò cave, was bound to change rapidly with the approaching decline of Minoan civilization. An increasingly dry, angular, abstract manner was substituted for the earlier fluid style, still imprinted with a naturalistic stamp. Though the profile outline still often retains the original characteristics, the eyes are transformed into huge and low globular bulges in the middle of the poorly marked eye-sockets that tend to occupy the largest part of the face. The nose becomes an enormous sharp protruberance, with pointed tip; the mouth, a diminutive horizontal cut. In some of the bell-shaped idols this angular stiffness of outline achieves the aspect of an applied mask.<sup>101</sup> The Mycenaean plastic art of the mainland must have followed much the same evolution. The space of time covered by us between the mask from the Psychrò cave and later products such as e.g. the cylindrical idol in Oxford is about the same as that separating the well known stucco head of Mycenae from, e.g., a head from Asine.<sup>102</sup> But at the beginning of the Hellenic age the human head on the pot from Knossos,<sup>103</sup> the body of which is decorated in severe geometric style, still recalls the head structure of the latest Mycenaean age.

We return to the Greek mainland, in order to find, in the painted head from Sparta (fig. 13, p. 282),<sup>104</sup> a fairly precise chronological datum provided by the decoration of

<sup>100</sup> *Early Hell. Pottery of Crete*, pl. xxvi; *CVA. Oxford, fasc. cit.*, p. 55, pl. II, nos. 4-7.

<sup>101</sup> For the evolution of this structure see *Arkades*, pp. 612 ff.: head from the Psychrò cave, fig. 649 a; then fig. 649 b-c; the idols from Gazi, Marinatos, 'Eφ., 1937, pp. 278 ff., pls. 1-2 (for their dating astride the Late Mycenaean and the Protogeometric ages cf. *ibid.*, p. 291); *Arkades*, p. 614, fig. 647 a-c; p. 618, figs. 650 a-c; *AJA.* v, 1901, p. 382, figs. 9-10 (fig. 9 = *CVA. fasc. cit.*, pl. II, 1-3). On the other bell-shaped idols from Crete see *Arkades*, p. 620, note 1.

<sup>102</sup> Bossert, *op. cit.*, figs. 87 and 86 c.

<sup>103</sup> *Arkades*, p. 620, fig. 652 = *Early Hell. Pottery of Crete*, pl. xxiv, 3.

<sup>104</sup> *BSA.* xxix, 1927-28, pl. I, a-b (cf. also the similar head from the sanctuary of Artemis Orthia, *ibid.*, pl. I c); R. J. H. Jenkins, *Dedolica*, Cambridge, 1936, pl. I, 1.



the neck, as well as by the coiffure with "Etagenperücke." These details indisputably indicate contact with orientalizing art. Contrary to the Hellenic canon, we still find a canon rather recalling the Minoan, with the big retroussé nose; slightly slanting eyes, wide-open and superficial; scarcely marked horizontal mouth; a greatly elongated receding lower part of the face, in contrast to the robust protruding chin of the Greek countenance. The greater angularity of features and dryness in surface rendering are also elements which we saw creeping in during the final stage of Minoan art. The ear has a two-volute shape, a characteristically Hellenic one which will persist in Greek sculpture. It appears on orientalizing Cretan bronzes furthest removed from imitation of foreign style, and can be seen as well on the Rethymno mitra.<sup>105</sup> The human head on the Arkades pot imitating the figure of a worshipper with uplifted arms<sup>106</sup> has a shapeless structure, which immediately recalls the painted idol on the urn from Fortezza.<sup>90</sup> But the image of a mourning woman over the urn lid from Arkades<sup>107</sup> also has a structure still wavering between Mycenaean and Hellenic canons. We can compare the countenance of the Sparta head with a large fictile head from Praisos (fig. 14) more closely.<sup>108</sup> The latter was found in a deposit of votive terracottas near the village of Vavelloi, dating exclusively in the Hellenic age, from the archaic to the Hellenistic period. The retroussé nose, so different from that of other terracottas, suggested to Halbherr the idea that the head represents an attempt at portraiture.

In conclusion we cannot, with Kunze, see in the siren from Praisos a sudden and unique appearance in Crete during the Late Mycenaean age of this fantastic new creature, due to sporadic influx of imagery of the Orient. Nor is it an isolated example among the many creations of monstrous and composite beings suggested by the fantasy of the Minoan people. We will not consider it the earliest manifestation, and so far the only one, of figure painting on Minoan pottery of Crete, corresponding to the Warrior vase from Mycenae.<sup>109</sup> The picture we can draw of the latest Mycenaean civilization in Crete would be argument enough in itself to exclude the likelihood of either hypothesis. Far from finding an effort to evolve new creations and new flights of fantasy, we cannot discover in the art of the island in this age anything but a painful and agonizing lingering of the old patrimony, an increasing stiffening of motifs and forms. In this age the centers of creation and diffusion of new artistic formulas and new ideas, the hearths of new political and artistic energies, had passed over to the strongholds of the Hellenic mainland. If a current of peoples and com-

<sup>105</sup> Cf. *Kretische Bronzereliefs*, pp. 231, 234; "I bronzi di Axòs," p. 129.

<sup>106</sup> *Arkades*, p. 245, fig. 291.

<sup>107</sup> *Ibid.*, pp. 184 f., figs. 205 a-c = *Early Hell. Pottery of Crete*, pl. XXIV, 2.

<sup>108</sup> *AJA.* v, 1901, pl. xi, 1 a-b. The shape of the polos, with a central band between two rings, finds a counterpart especially on ivories from Nimrud of the ninth century B.C.: cf. Valentin Kurt Müller, *Der Polos*, Diss. Berlin, 1915, pl. A, no. 15.

<sup>109</sup> Bossert, *op. cit.*, figs. 133-35. Kunze's comparison cannot be extended, at least, to the composition of this scene, which is entirely alien to the spirit of Minoan art which spreads the representation freely in space; on it we have rather the uniform repetition of the same identical figure peculiar to geometric art. Nor does the comparison extend to the shape of the faces which show huge noses with tip pointed downwards. In spite of a certain naturalistic effort, peculiar to this single vase, its other characteristics do not differ much from the abstract decorative spirit which impregnates the numerous remains of human figures on other sherds from Mycenaean sites of the Peloponnese.



merce continued to pass between the Greek islands and the shores of Syria in this interlude of ancient history we may notice artistic products and influences passing almost exclusively in the opposite direction: in the direction of the displacement of peoples caused by migrations of the Greeks in Hellenic lands. But the very possibility of mistaking Cretan products of early Hellenic art for those of the latest Mycenaean art, is indeed a powerful confirmation of our picture of the dawn of Hellenic art itself—a picture strongly opposed by Kunze and many other scholars—in direct contact with a persistent and languishing prolongation of the indigenous tradition. This dormant lingering of the tradition and the artistic and technical skill persisted in the island long enough to meet the reluctant and late shaping of the Geometric style, so alien to the spirit of this tradition, and to meet on the other hand the vivifying breath of new streams of art arriving from the East. In the manifold and tentative production at this time, when the meeting of so many different currents took place, it is neither rare nor strange to notice—as I have done in my studies on this subject—the contamination of new motifs arriving from the East with elements and forms derived from the ancient local tradition, and, on the other hand, the adaptation of motifs of the old repertory into a new decorative system. The siren from Praisos, consequently, finds its obvious place in this renewed stream of Oriental art among the many monstrous creatures suggested for the second time to the art of Crete by the fantasy of the Orient. The earliest appearance of many of them is revealed among the finds of Arkades: the bird-griffin, the pegasus, the double-bodied lion, the winged man.<sup>110</sup> Other fantastic beings which had reached Crete many centuries earlier with the same streams, of which stiffened and decadent representations can be found in the latest Mycenaean products as long as figure representations appear,<sup>111</sup> now recur again in clearly oriental garb. Soon, however, both oriental forms and elements of the indigenous tradition make place for enduring forms, imposed by the Hellenic spirit and artistic feeling. The motif of the siren is one of those which show how this oriental current followed the shores of Syria and the bridge of the large islands of Cyprus and Rhodes to reach Crete directly from there, thence expanding to the Aegean islands, to the Peloponnese and the Greek mainland. In fact, a branch spread to the coast of Ionia, and created there at a very early date the fine ivory siren from Ephesus,<sup>112</sup> clearly revealing its oriental model. It is

<sup>110</sup> *Arkades*, pp. 528 f.

<sup>111</sup> On very late representations of sphinxes in Mycenaean art see *Arkades*, p. 615 and note 1; cf. also p. 570 (on wingless sphinxes in Minoan art see *PM*, iii, pp. 418 ff.). For the representation of griffins, we mentioned earlier the larnax and the crater from Palaikastro, *Arkades*, pp. 636 ff., figs. 656 and 659.

<sup>112</sup> D. G. Hogarth, *Excavation at Ephesus*, London, 1908, pl. xxvi, 4. Kunze correctly points out that the form of the Hellenic siren never shows a close relationship with the early Egyptian image of the bird-man, and that the ivory plaque from Ephesus confirms the stronger probability of a derivation from the Anatolian repertory of fantastic creatures. It is completely legitimate to suggest a simplification and clarification on the part of Hellenic art of the ill-connected and hardly comprehensible Anatolian creature of the scorpion-man, in transforming the scorpion elements into bird elements. But this is one more argument in support of the view of the appearance of our motif in the Hellenic world with the current of orientalizing art which carried so many other motifs and forms of Phoenician-Syrian and Hittite art to Greece. In Asia, in fact, a fantastic being similar to the Hellenic siren may be said to be completely absent from early Mesopotamian imagery. It appears for the first time on a Kassite kudurru (*Mém. de la Délégation en Perse* vii, 1905, pl. xxvii), and assumes an aspect not far removed from that of the Hellenic creature, though with a bearded head in the Aramaic-Hittite area, in sculpture, reliefs



indisputable, however, that the formula of the Hellenic siren is entirely alien to this image; that it was created in Cretan art and strongly imposed itself there. It is not fortuitous that the stations of this formula are Rhodes, Crete, Thera, Sparta.

Praisos is the town in Crete where the language of the aboriginal Cretans was preserved down to the classical age, for which evidence remains in Eteocretan inscriptions written in the Hellenic alphabet. It is obvious that we cannot expect to find, side by side with this ethnical and linguistic conservatism, a survival of Minoan art and customs, for which classical antiquity would not have failed to transmit some record. This statement in no way excludes, however, a more prolonged lingering of the past, a more tenacious attachment to the great pre-Hellenic artistic tradition and a more reluctant acceptance of new artistic tendencies and formulas in Praisos, and, probably in other segregated regions less accessible than the rest of the island, because of mountains or other factors, to the influence of the main centers of Hellenic immigration. The artistic phenomenon which we can expect in these regions can be nothing but an enhanced aspect of the laborious formation of the Hellenic style in Crete as a whole. A detailed study of the different ceramic factories of Crete, initiated by me, I have unfortunately not been able to bring to completion. However, from material already published, the finds from Praisos, far from excluding, seem to confirm the above supposition. It will be enough to mention the tomb furniture of large urns and hydriae in Tomb 53.<sup>113</sup> Although some decorative elements reveal their very advanced date in Cretan geometric art, their technique and shapes are still tenaciously bound to the Late Mycenaean manner, and show a peculiar reluctance to adjust themselves to the architectural balance of Hellenic forms. Their decoration shows that loose, empty, composition with curvilinear designs observed in the fragment with the siren. The fact that Praisos is the place from which the admirable fragment of a pinax, with its representation in an exquisite Hellenic rhythm and drawing,<sup>114</sup> emanated, is just one more confirmation of our thesis of the direct relationship between the survival of Minoan tradition and the unexpected and astonishing eruption of Hellenic art.

### 3. ZEUS, APOLLO, ATHENA

In publishing the important group of archaic bronzes found at the end of the last century by the Italian Expedition in Crete, among the ruins of the temple of Aphrodite at Axòs, I emphasized the special interest for early Greek religion of a mitra with incised decoration.<sup>115</sup> A frieze of marching lions and of rosettes runs along the edge on the front. The central representation, separated from the frieze by a triple rib, shows a high and slender tripod, flanked by two rampant lions, above which appears a human bust, the forehead surrounded by a fillet and with curly locks spreading downward. Below the head are a sword and a shield with the lively device of a polyp. The very fine incision has partially disappeared because of surface wear.

and seals from Tell Halaf and Carchemish. The motif is seen in Assyrian art from the ninth century, and shows an aspect close to the Hellenic canon especially in neo-Babylonian art (e.g. on the neo-Babylonian cylinder seal, O. Weber, "Altorientalische Siegelbilder," *Der alte Orient* xvii-xviii, 1920, p. 69, fig. 349), and later in Persian art (*ibid.*, p. 67, fig. 331).

<sup>113</sup> *BSA*. xii, 1905-06, pp. 23 ff., figs. 3 ff.; Pfuhl, *op. cit.*, figs. 39; *Arkades*, p. 574 f.

<sup>114</sup> *Early Hell. Pottery of Crete*, pl. xxix.

<sup>115</sup> "I bronzi di Axòs," pp. 124 ff., pl. xiii.



In order to study all the elements of our representation we reproduce a drawing of the design on the mitra (fig. 15).

I have interpreted this scene as Apollo's apparition above his tripod, the symbol of his mantic power. Some elements alien to the character of Apollo in the classical age, such as the unusual weapons and the lions, were explained by me as elements received by the Hellenic god from the pre-Hellenic religion of Crete upon contact of the Greek with the pre-Hellenic world, at a time when the god's personality was being shaped. Miss Margherita Guarducci, opposing my interpretation, thought she recognized in the figure above the tripod an image of Athena.<sup>116</sup> I admit that my explanation implies "some rather complicated reasoning, in order to justify the presence of the wild beasts around the Apolline tripod as well as the weapons of the god himself:" this is not surprising, since the whole picture of the dawn of Greek religion does not present itself in crystalline sharpness. The origin of a large number of Hellenic divinities, as well as their single attributes and epithets, is still problematic, and the question of the relation of Greek mythology to pre-Hellenic religion is still open to the liveliest controversy. But it seems to me that Miss Guarducci is performing an acrobatic feat in trying to support the shaky structure of her own much more complicated theory. According to her, the only suitable name for a divinity armed with a sword, that is, essentially a weapon for waging war, would be Athena, the warlike goddess.<sup>117</sup> This goddess came into Hellenic religion from the pre-Hellenic world, but more specifically from the pre-Hellenic religion of the mainland, that of the fierce people of the strongholds of Mycenae and Tiryns, and not from the peaceful Minoan pantheon of Crete. The goddess, imported into the island by the invaders, assumed in addition to her own, some elements of the peace-loving Cretan goddess, the *πότνια θηρῶν* from whom she derived the sacred, rampant animals of our mitra. The birds represented above the handles of the basin may be simple decoration, but possibly also living creatures: they are peculiar to the Minoan Mistress of Animals, but they undoubtedly passed from her to the classical Hellenic goddess. The tripod, however, represents oracular power. In this element we must recognize a quite unexpected aspect of Athena, thus far never discovered by other scholars. This element would also have been imported by the goddess to the island from the Peloponnese. Indeed, we have evidence of a mantic cult at Axòs, the site where the mitra was found, thanks to the Greek coinage of the town. These coins invariably represent the tripod on the reverse; on the obverse they generally have the image of Apollo, alternating with that of Zeus and more rarely with Artemis. This fact is no obstacle, however, to the suggestion that an ancient cult of the mantic Athena may have been replaced in later times by the triumphing cult of Apollo.

Miss Guarducci's main argument in rejecting my interpretation of Apollo in the representation on the mitra and in deciding that "without the shadow of a doubt" we are dealing with a female divinity, is based on a fragment of a pithos decorated

<sup>116</sup> "Due aspetti di Atena nella religione cretese," *Riv. del. R. Istituto d'archeologia e storia dell'arte* vi, 1937, pp. 7 ff.; cf. also *Inscriptiones creticae* ii, *Tituli Cretae orientalis*, Rome, 1939, p. 47.

<sup>117</sup> Miss Guarducci herself states also that in the only cult of the armed Athena for which we have evidence in the archaic age of Crete, from an inscription of Arkades, she is described as having a bow and quiver. Cf. *Inscr. creticae* i, *Arcades*, 4.



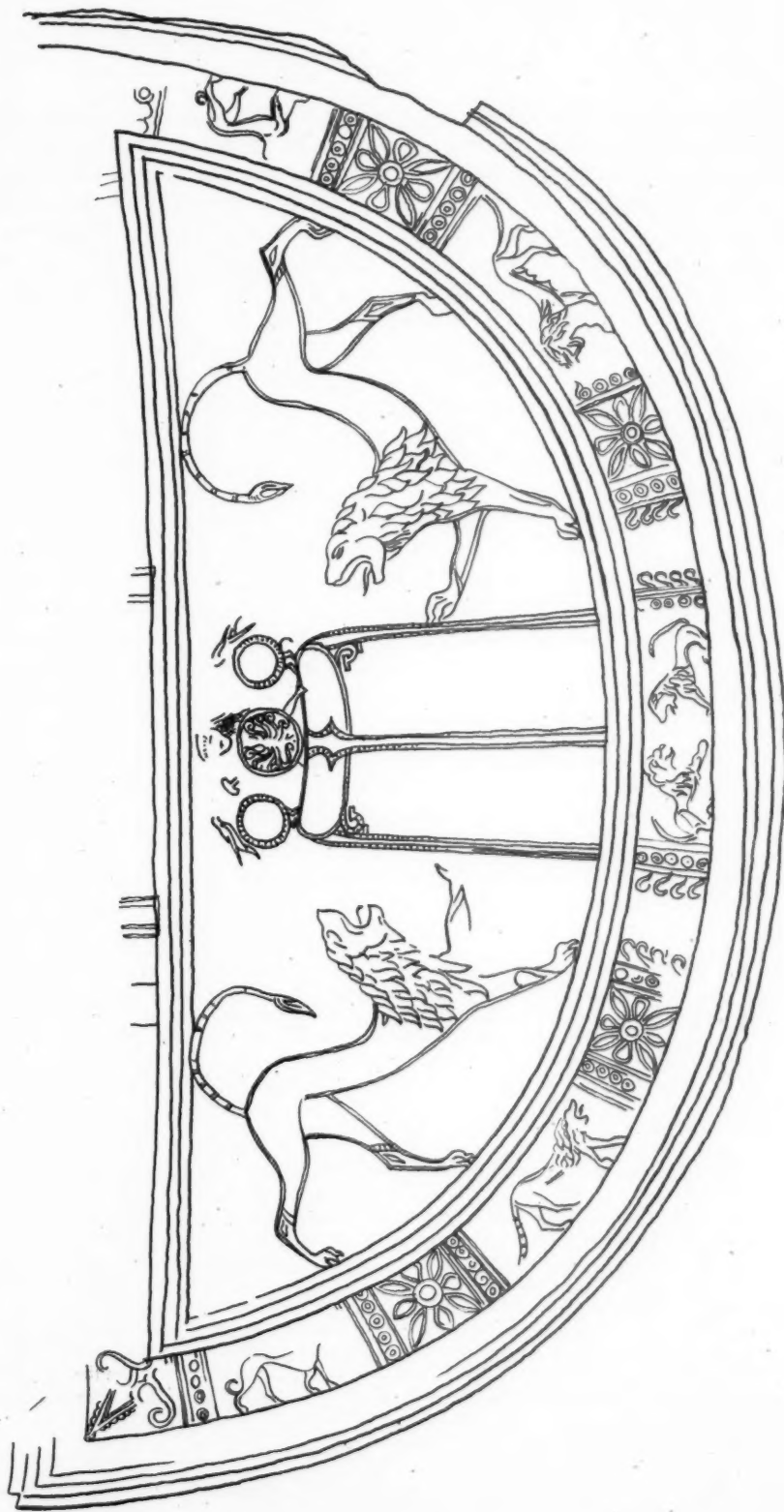


FIG. 15.—BRONZE MITRA FROM AXOS  
(Original Drawing)



in relief and found at Arkades.<sup>118</sup> It shows the bust of a figure, similarly armed with a round shield and sword, a figure which was repeated in a moulded frieze around the neck of the pithos, just below the rim. The argument that the polos covering the head of this figure makes it a female figure had been used by its first publisher Savignoni<sup>119</sup> in the identification of the image with the palladium of Athena. But the argument is no longer valid, since it is well known that the polos is as much a male as a female headdress.<sup>120</sup> It was used by gods and men in eastern civilizations, whence it is generally considered that the fashion came to Crete during the orientaling period.<sup>121</sup> But it was also used in the Minoan civilization, and not only in the shape of the high and adorned polos of the terracotta head from Piskokephalo,<sup>122</sup> but even later, in Late Mycenaean<sup>123</sup> and Submycenaean products. It was worn at this late period, e.g. by the "Master of Birds" on the gold pendant of the Aegina treasure.<sup>124</sup> In the same way the polos is not an exclusive attribute of female divinities in Greek times. It was also worn by gods, and indeed particularly by Apollo, especially on the coast of Asia Minor, e.g. at Klazomenae.<sup>125</sup> Limiting ourselves to Crete, we may mention among the many examples, a terracotta plaque from Xerolimni near Sitia, on which both figures, a man as well as a woman, wear an identical high cap.<sup>126</sup> The polos recurs in all likelihood on several bronze statuettes of the earliest archaic style,<sup>127</sup> and it is worn especially, on monuments of large size, by warriors on the stone frieze which decorated a temple at Prinià. It was indeed the close resemblance of the frieze on our fragment of a pithos to the large architectural frieze that correctly induced Pernier<sup>128</sup> to abandon the interpretation of the figure on the former monument as the palladium—an image of divinity not very well suited for repetition as a purely decorative pattern in a frieze<sup>129</sup>—for the more obvious inter-

<sup>118</sup> *Early Hell. Pottery of Crete* (hereafter cited as *EHPC.*), pl. xxxi, 5.

<sup>119</sup> *AJA.* v, 1901, pp. 414 ff., pl. xiv, no. 9; see also V. K. Müller, *Der Polos*, p. 69.

<sup>120</sup> V. K. Müller, *op. cit.*, pp. 23, 56.

<sup>121</sup> Cf. also F. Poulsen, *Der Orient und die frühgriechische Kunst*, Leipzig, 1912, pp. 59, 50–51, fig. 19, etc.

<sup>122</sup> Bossert, *op. cit.*, fig. 286.

<sup>123</sup> Cf. e.g. *ibid.*, fig. 296.

<sup>124</sup> *Ibid.*, fig. 186; cf. also M. P. Nilsson, *The Minoan-Mycenaean Religion and its Survival in Greek Religion*, Lund, 1927, p. 316, fig. 94.

<sup>125</sup> V. K. Müller, *op. cit.*, pp. 71 ff.

<sup>126</sup> *Arkades*, p. 542, fig. 610; cf. also Demargne, *BCH.* xxvi, 1902, p. 573 f., fig. 2. The two figures were interpreted by me as Theseus and Ariadne, and this interpretation was accepted by A. von Salis, *Neue Darstellungen griech. Sagen*, loc. cit., p. 8 f. A low polos is also probably borne by Theseus in a similar representation on a pinax from Taranto: see Langlotz, *Antike Plastik W. Amelung zum 60. Geburtstag*, p. 114, fig. 1; von Salis, *Theseus und Ariadne*, p. 19, fig. 17.

<sup>127</sup> See the bronze statuettes from Arkades, *AJA.* v, 1901, p. 396, fig. 6, and from the Idaean cave, *Museo Ital.* ii, fig. on p. 734 = *Arkades*, p. 702, fig. 664.

<sup>128</sup> *Annuario* i, p. 50 f., fig. 19; p. 94, fig. 49.

<sup>129</sup> A motif originally of religious meaning, but having great ornamental value, such as the image of the Mistress of Animals between her heraldic animals, was sometimes, however, adopted as a purely decorative pattern repeated in a frieze, e.g. on the large pithos from Prinià: *EHPC.*, pl. xxxii. But the images of warriors and horsemen are seen most frequently on decorative friezes. Limiting ourselves to Crete and the early Greek age, we find that our pithos fragment was already compared by Pernier with fragments from Prinià and Lyttos showing horsemen both galloping and proceeding slowly: *Annuario* i, p. 93 f., fig. 47 f.; F. Courby, *Les Vases grecs à reliefs*, Paris, 1922, p. 50, fig. 11; *EHPC.*, pl. xxxi, 6. As for the frieze of hoplites marching behind their shields, the decorative quality of the motif had already been recognized by Minoan artists. A seal impression from Knossos has three similar warriors, concealed in great part behind their big figure-eight shields, stepping over a dado decorated with spirals: *PM.* iii, p. 313, fig. 204. The motif approaches our rendition more nearly when the round shield was introduced by Mycenaean art. It will be enough to mention the Warrior vase. The bearded and



pretation of a generic armed ephebus. This interpretation has been successively accepted.<sup>120</sup>

We may begin with the supposed image of the palladium, in order to follow Miss Guarducci's arguments in favor of her interpretation that this is Athena. It is generally accepted that Athena is a non-Hellenic goddess, introduced into the Greek pantheon through contact of invaders with the pre-existing civilization on the soil of Greece. From the religious area over which Cretan-Mycenaean civilization spread, the goddess derived her name as well as several of her attributes and epithets: her owl, serpents, and olive tree. Among these symbols the palladium—the cult image lying hidden in the heart of the citadel as a pledge for the existence of the town itself—is one of those which has no correspondence in the character of the Hellenic gods. It corresponds well, on the other hand, to the cult of the domestic Minoan divinity, worshipped by the priest king, to which only a small shrine was dedicated in the center of the royal palace. In Athenian legend derivation from such a cult is hinted at by the goddess' relationship with king Erechtheus, in whose palace she abode from the very beginning. A well known pinax in painted stucco from Mycenae<sup>121</sup> is generally considered a representation of this pre-Hellenic palladium. Here the image of the armed goddess, hidden behind her figure-eight shield, is worshipped by two women or priestesses flanking her, in front of a small altar. The bellicose Athena of the Homeric poems, however, presents a character far removed from the peaceful domestic goddess as she appears in representations of the Minoan world, as the goddess of the household, of love and fecundity. How could this transformation have taken place? Nilsson<sup>122</sup> suggested that it was achieved by the inhabitants of the Hellenic mainland who had almost completely absorbed Minoan civilization. The needs of men create the character of their gods. The princes of Mycenae and Tiryns were warlike princes. Therefore from the Minoan goddess protecting the household they asked first and foremost protection for their warlike enterprises and their conquests. Thus the goddess of the household became principally a goddess of war. Of the qualities belonging to her original nature as goddess of love and maternity, only a trace persisted in some secondary cults, such as that helmeted type of warrior of Mycenaean art persisted into Protogeometric and Geometric art. It can be seen in Crete on the cast bronze bars from the Idaean cave (*Museo Ital.* ii, Atl., pl. xi), as well as on a gold plaque from the same find (*ibid.*, fig. on col. 751). The same type of warrior in profile, recalling rows of warriors on Greek geometric pottery, can be seen on terracotta reliefs, e.g. on specimens from Praesos (cf. E. Hall Dohan, *MMS.* iii, 1931, p. 210, figs. 1-2). A similar larger frieze is found on a Boeotian relief amphora, for which connections with motifs of Cretan pre-Hellenic and early Hellenic art have already been noted (see also R. Hampe, *op. cit.*, pl. 39, 2. For Cretan connections in the Boeotian amphoras, cf. "Cretule di H. Triada," p. 142, note 1). The type becomes increasingly refined, when the bearded and helmeted warrior of geometric style gives way to an youthful soldier with curly locks falling over the shoulders. This appears on gold plaques from Corinth and Thera (Furtwängler, *AZ.* xlii, 1884, pl. 8, nos. 6-7; G. Pinza, *Materiali per la etnologia antica toscano-laziale*, Milan, 1915, p. 407, figs. 330-31; Pfuhl, *AM.* xxviii, 1903, p. 225 f., pl. v, 15). The motif persisted in Crete down to the advanced sixth century B.C., e.g. on a terracotta sima from the Diktaean Temple at Palaikastro (J. D. S. Pendlebury, *The Archaeology of Crete*, London, 1939, pl. XLIII, 1). Series of horsemen and hoplites behind their shields are also frequent on archaic Etruscan friezes (Pellegrini, *Studi e materiali di archeologia e numismatica* i, Florence, 1899-1901, p. 97, fig. 5; p. 104, fig. 10, etc.).

<sup>120</sup> Cf. Courby, *op. cit.*, p. 51, fig. 12.

<sup>121</sup> Bossert, *op. cit.*, fig. 43.

<sup>122</sup> "Die Anfänge der Göttin Athene," *Kgl. Danske Videnskabernes Selskab, Meddelelser, Hist.-fil.*, iv, 1921-22, no. 7, pp. 16 ff.; *idem*, *A History of Greek Religion*, Oxford, 1925, p. 26 f.



of Athena Μήτηρ mentioned by Pausanias for Elis, evidence of which was found by Miss Guarducci for Rethymno in Crete.<sup>133</sup> We still have to answer the question why these princes should have chosen for such a function a female Cretan divinity, so alien in warlike qualities, rather than the Minoan god. Another scholar, von Wilamowitz, ventured an aetiological explanation for this fact, suggesting that the proud character of Hellenic warriors would have refused obedience to a male, even if it were a divinity. In reality, a slightly more incisive analysis of the intimate nature of Athena<sup>134</sup> leads us to consider her qualification as a "goddess of war" as a simplification. It is true that in Homer she is invoked by heroes in battle, she supports their strong deeds; and it is also true that this militant goddess is represented in Greek art as early as the period of Protocorinthian pottery. But, just as she is the friend of Achilles and of Diomedes, she helps Jason in the construction of a boat, Bellerophon in his taming of Pegasus. As she appears in the *Iliad* on the side of the warring heroes, assisting in the accomplishment of their harsh and glorious deeds, so in the *Odyssey* she is the constant friend and inspiration of Ulysses, the hero of reason, the πολύμητις. The essential character of the goddess is identified with that of her hero; she is herself called πολύμητις in the *Homeric Hymn* (28, 2), even before she is presented as a warlike goddess. She is reason, advice, as is pointed out in the legend of her birth from Metis. The Olympian cycle of Herakles, near whom the presence of the goddess of good advice is constant, corresponds in figured art to the literary epic of the wanderings and suffering of Ulysses. She supports the heroes of the *Iliad* in their deeds, not of brutal violence, but of works prompted by reflection and dignity, as it is shown by the efficacy of her appearance to the irate Achilles. She is in reality the fierce enemy of the god of war, of superb and brutal Ares, fond of violence and slaughter, the god hated by the entire Hellenic pantheon. The real nature of Athena is, as a matter of fact, associated with energy, skill, craftsmanship (τέχνη), which connect her directly with the Minoan goddess of the household. Therefore Athena also protects the household work of women, helps Penelope in her weaving. Therefore in Achilles' words the highest praise for a girl is that she rivals Aphrodite in beauty and Athena in skill. On the Acropolis at Athens the shrine of Athena Ergane is encountered before the image of the Promachos. The goddess of action, of the attainment of high aims through action and wisdom, is the protectress of heroes in the epic songs of Troy, but at the same time she is also the adviser of craftsmen, the helper of carpenters, bronze workers and potters.

We accept the thesis, now generally admitted, that the people who adopted the Minoan civilization in the Peloponnesos were of Hellenic stock. Some elements alien to the Cretan civilization may be noticed in the architecture of the megaron, in garments, weapons and coiffures. But in all its artistic production there appears no indication that the mainland did not accept Minoan religion. Even if we wish to admit the possibility that there was a transformation of the character of certain divinities in accordance with activities and tendencies differing from those of the Cretan people,

<sup>133</sup> See Farnell, "Cretan Influence in Greek Religion," *Essays in Aegean Archaeology presented to Sir Arthur Evans*, Oxford, 1927, p. 16; Guarducci, *Rivista Ist. d'arch.*, loc. cit., pp. 12 ff.

<sup>134</sup> See the discerning analysis of this goddess by Walter F. Otto, *Die Götter Griechenlands*<sup>2</sup>, Frankfurt a. M., 1934, pp. 55 ff.



there is no proof for the antiquity of the cult of Athena in the form of the palladium. On the contrary, we know for certain that her earliest cult image on the Acropolis of Athens—a city owing its very name to the goddess—was a wooden idol which by no means had that aspect.<sup>135</sup> Let us, therefore, again consider the painted plaster tablet from Mycenae. Must we really recognize in it a palladium, in the sense of an effigy of a divinity? We see two very worn extremities, painted in white—that is, the color used for the nude female figure—protruding from a large figure-eight shield; but they are disproportionately large, not only in comparison to the worshipper's arms, but even to the supposed goddess herself, and they are furthermore entirely inarticulate. Above the shield part of the head can be seen, but there is no trace of feet or garments under the lower edge of the shield.<sup>136</sup> A similar "palladium" appears in the sky, near the signs of the firmament, on the famous ring from Mycenae which almost provides us with a view of the "Minoan pantheon,"<sup>137</sup> on which we can notice no penetration of motifs alien to the Minoan world. Here, too, a sketchy head and an arm holding a spear or staff are added above; but below, the shield seems solidly fixed on the ground by a standard. Similar images of beings armed with the figure-eight shield are found not only at Mycenae, but in Crete, where, by the way, the small shrines in the center of the royal palaces, whence the conception of the palladium itself was derived, are more characteristic than in mainland palaces. A seal impression from Knossos,<sup>138</sup> on which a similar image wears a conical helmet and holds a spear, cannot be interpreted, with Miss Guarducci, as a hunter. Two more figure-eight shields are set obliquely in space at its sides: these cannot be parts of two other hunters, since in the fragment of the signet there is space enough for parts of their bodies and spears to be seen. This seal impression particularly supports an interpretation of these representations as "palladia," but in the sense of divine symbols in the shape of shields:<sup>139</sup> the symbol of divine protection, as Persson suggests, according to the expression of the Psalmist, "our shield belongeth unto Jehovah" (*Ps.* lxxxix, 18); one useful in averting evil. Because of the figure-eight shape of the Minoan shield, it was particularly suitable to be anthropomorphized by the animistic fantasy of Cretan artists. On another seal impression from H. Triada (fig. 16)<sup>140</sup> the summary representation of extremities added to two similar shields is a sure indication of such a half-anthropomorphization. It cannot be due to the incapacity of the artists, who reveal in all other representations of these signets an unmatched refinement and accuracy of line. Doubts have been expressed about the existence of a cult of the shield.<sup>141</sup> They should

<sup>135</sup> See Frickenhaus, *AM.* xxxiii, 1908, pp. 17 ff.

<sup>136</sup> This image is called "bouclier-symbole" by Picard, *Rev. de l'histoire des religions* xeviii, 1928, p. 65.

<sup>137</sup> Bossert, *op. cit.*, fig. 399 c; A. W. Persson, *Rel. of Greece in Prehistoric Times*, pp. 70 ff., p. 178, fig. 22.

<sup>138</sup> *PM.* iii, p. 313, fig. 205.

<sup>139</sup> This interpretation was offered by Gardner, *JHS.* xiii, 1892-93, pp. 21 ff.; cf. A. J. Reinach, "Itanos et l' 'inventio scuti'," *Rev. de l'histoire des religions* lx, 1909, pp. 161 ff., 309 ff.; lxi, 1910, pp. 197 ff.; *PM.* ii, p. 52; iii, p. 313 ff.

<sup>140</sup> "Cretule di H. Triada," p. 124, no. 116, fig. 132 and pl. xiv. See also the lentoid gem in grey steatite from a tomb at Mavro Spilio near Knossos, on which two warriors behind similar shields are seen stepping to the left: *BSA.* xxviii, 1926-27, pl. xix, vii B 5.

<sup>141</sup> Nilsson, *Minoan-Mycenaean Rel.*, pp. 349 ff. See the opposite thesis, Persson, *op. cit.*, pp. 73 f., 91 f.; A. B. Cook, *Zeus* iii, p. 650, note.



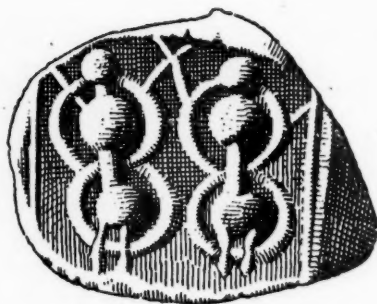


FIG. 16.—SEAL IMPRESSION FROM H.  
TRIADA  
(*Annuario viii-ix*, p. 124, fig. 132)

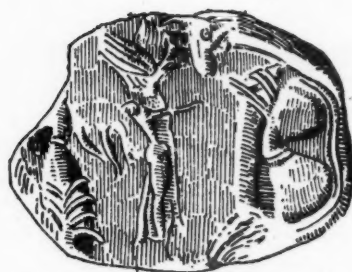


FIG. 17.—SEAL IMPRESSION FROM  
ZAKRO  
(*Annuario viii-ix*, p. 183, fig. 233)



FIG. 18.—IMPRESSED GLASS PLAQUE FROM  
MYCENAE  
(Evans, *P.M.* iv, p. 454, fig. 379 a)



A



B



C

FIG. 19 A-C.—COINS FROM AXOS  
(Svoronos, *Numis. de la Crète ancienne*, pls. II, 30; III, 1 and III, 10)



be immediately dispelled by a number of well known monuments on which the shield is associated with other religious symbols, such as the sacred knot, in a conspicuous position in scenes of undoubted religious meaning, near sanctuaries, altars with the sacred tree and the like.<sup>142</sup> Any further hesitation must be abandoned before a signet from Zakro published by me (fig. 17).<sup>143</sup> Here a pair of worshippers, either two private persons or priests, clasping hands, approach in an attitude of adoration a heap of sacral objects, consisting of a large figure-eight shield, a semi-cylindrical one and a conical helmet.

This sketch of the formation of the character of Athena in no way confirms her predominating warlike nature from the time of the ancient Mycenaean cult in the Peloponnese, nor the derivation of the palladium from the artistic patrimony of that pre-Hellenic age. Our analysis also absolutely excludes a mantic quality in the deity. "Everything dreamy, passionate and languorous is alien to her;" Athena is "daylight."<sup>144</sup> No tradition and no evidence bear witness to her mantic character. It is possible to refute one by one all the arguments brought forward by Miss Guarducci for a contrary contention. An archaic inscription from the acropolis at Argos referring to the cult of Athena Polias speaks of χρήματα χρηστήρια. Vollgraff, in his thorough publication of the inscription, interprets this passage as "suppellectile qua ad res divinas utuntur ne utitur."<sup>145</sup> He therefore explains the word χρηστήριος in the meaning of "useful," a meaning said by lexicographers to be as common as that of "oracular."<sup>146</sup> This is Vollgraff's interpretation, although he suggests the existence of an oracle of Athena at Argos on the ground of some obscure words of a difficult and fragmentary archaic inscription from Mycenae.<sup>147</sup> From these words he understands that "Phraiaridas Mycenaeus a Minerva ex arce (= Polias) supplex advenit," that is, that Phraiaridas returned to Mycenae after having gone to consult the oracle of Athena Polias at Argos, bringing back its answer. But in the inscription there is nothing but the word ἱκέτας, "suppliant." There is no hint at any kind of oracle. An inscription from Mantinea,<sup>148</sup> which mentions responses of an oracle, refers to the goddess Alea. She was originally an independent divinity, the protectress of that town. When she became the Polias divinity of the Arcadian community, she was identified with Athena, the Polias goddess of Greece herself. But the identification with Athena does not seem entirely accomplished even as late as the historical age.<sup>149</sup> There is no evidence at all for recognizing with Bourguet an oracular

<sup>142</sup> Among the many monuments see the fine signet-type from Zakro, on which shields and helmets are placed in front of a shrine, *PM.* iv, p. 867, fig. 855.

<sup>143</sup> "Cretule di H. Triada etc.," p. 183, no. 195, fig. 233 and pl. xviii.

<sup>144</sup> W. F. Otto, *op. cit.*, p. 69.

<sup>145</sup> *Mnemosyne* lvii, 1929, p. 208.

<sup>146</sup> The interpretation "oracular" was suggested for the inscription at Argos by É. Bourguet, *REG.* xliii, 1930, p. 6 f. Miss Guarducci misinterprets Pollux, when attributing to this author the statement that Plato the playwright was the first to use χρηστήριος in the sense of "useful." Pollux' passage (*Onom.* x, 11) merely refers to the usage by the playwright of this adjective in the sense of sacred furniture, employed "πρὸς θεωρίαν ἢ θυσίαν", opposing it to the broader meaning of useful for household furniture in general, "ἐπὶ τῶν κατ' οἰκίαν χρησίμων."

<sup>147</sup> *Mnemosyne*, loc. cit., p. 221 f. See this inscription in *IG.* iv, 492; Schwyzler, *Dialectorum graec. ex. epigr. potiora*, Leipzig, 1923, no. 97.

<sup>148</sup> *IG.* v, 2, 72; R. Meister, *Berichte über die Verhandlungen der k. sächsischen Ges. d. Wiss. zu Leipzig* lxiii, 1911, pp. 193 ff.; Guarducci, *Studi e materiali di storia delle religioni* xiii, 1937, pp. 57 ff.

<sup>149</sup> Cf. Nilsson, *Griech. Feste*, p. 86.



character for Athena Chalinitis of Corinth, simply because in Pindar's poetry she presents Bellerophon during his sleep with the bit for taming Pegasus. If sleep sometimes appears among mantic practices, this does not mean that the latter are involved every time the common expedient of sleep is introduced in mythology and literature. Nor does the presence of remains of tripods among ruins of a town testify to the seat of a mantic cult. If such a cult must be claimed for Athens, it should likewise be claimed for Argos, Olympia, Ithaca, and endless other sites in Greece. Picard's interpretation of a passage in Herodotus (v, 72), referring to Kleomenes' visit to the Acropolis of Athens as a consultation of an oracle,<sup>150</sup> has no support in the historian's text. The passage says merely that the Spartan king "approached the shrine of the goddess to address himself to her." There is no mention of a prophecy, nor is the usual formula for an oracular consultation used.<sup>151</sup> It is quite possible, in fact it is beyond doubt, that the Polias could be consulted by a worshipper seeking inspiration and comfort, and not simply in regard to a warlike deed. We have seen that one of the essential functions of the goddess of μῆτις is to give advice and direction for action. Athena is also Πρόνοια,<sup>152</sup> the goddess who foresees and advises. The function of giving responses is included to some extent in this conception. Athena, the "provident," not prescient, is worshipped at Erythrae as Φημίς, the goddess of omens, with Zeus Φήμιος.<sup>153</sup> But from the mass of information we have about her it is never attested that she possessed a μαντεῖον. Aelius Aristides, who evidently tries to provide us with a complete picture of her qualities and attributions,<sup>154</sup> says nothing about her oracular character, except — evidently referring to the Athena Προνοία of Delphi — that Apollo made her the guardian of his own oracles and bade his worshippers sacrifice to her first. Only Zenobius tells us of a peculiar kind of divination attributed to the goddess,<sup>155</sup> by means of pebbles; but no cult is mentioned corresponding to this strange peculiarity of hers.

Having thus excluded Athena, we return to the obvious interpretation of the Axòs mitra as a representation referring to Apollo, and to his mantic qualities symbolized by the tripod, a god and a cult for which the predominance in that town are attested by coins. Let us see whether the explanation of the elements alien to the classical cult and iconography of Apollo really present so many difficulties.

First of all, this is a question of an epiphany of the god, and not of his full image. Only his bust is represented above the huge tripod, much higher up than we should find it if a figure standing behind the tripod and partly concealed by it were intended.<sup>156</sup> The epiphany of a divinity descending from the sky is undoubtedly one of the common features in the iconography of Cretan-Mycenaean religion.<sup>157</sup> In these

<sup>150</sup> See Bourguet, *loc. cit.*, p. 6, note 1.

<sup>151</sup> Cf. e.g. shortly before in the same book (v, 52) in connection with the same Kleomenes and with Dorieus: χρησθηρίῳ χρῆσάμενος.

<sup>152</sup> *SIG.*<sup>3</sup> iii, Leipzig, 1920, no. 1014, 27.

<sup>153</sup> See Farnell, *Cults of the Greek States* i, pp. 306 ff.

<sup>154</sup> See Arist., 17 ff., ed. Dindorf i, 2, pp. 12 ff.

<sup>155</sup> παροιμία v, 75 E: ἄλλοι δὲ λέγουσι τὴν Ἀθηνᾶν εὐρεῖν τὴν διὰ τῶν ψήφων μαντικὴν.

<sup>156</sup> Between the lower edge of the shield and the upper edge of the basin there is only an oblique stroke on the left of the drawing. I succeeded in seeing some other zigzag strokes farther to the right, of uncertain meaning, perhaps simple space filling. In any case, it cannot be a question of remains of a female gown, for which the fashion of the time would not allow the oblique trend indicated even by the single stroke of our drawing.

<sup>157</sup> See Nilsson, *Minoan-Mycenaean Rel.*, pp. 238 ff., 295 ff.; Cook, *Zeus* ii, pp. 47 ff.



apparitions we see female divinities, as full human figures or in the shape of bell-shaped female idols, as well as male divinities. The god is armed with a spear, or with sword and bow, or protected by the big figure-eight shield. For the latter weapon, even omitting the above mentioned monuments on which the divine image may be merely an anthropomorphization of the shield itself, or in which at least the sex of the divinity is uncertain, there is the evidence of a late larnax from Milatos.<sup>158</sup> The deity dominating animals or fantastic creatures, such as sphinxes or griffins, may also be either female or male in Minoan religion. We met the male deity in the latest Mycenaean or rather Submycenaean art in the Master of Birds on the gold pendant from Aegina.<sup>159</sup> The same deity passed into the repertory of the early Hellenic art of Crete, and is seen in the Master of Sphinxes on a cylindrical urn from Arkades.<sup>160</sup> Perhaps the motif of the epiphany also appears associated with the motif of the two rampant lions flanking the divinity, if we interpret as such the representation of the "Mother of the Mountains" on the well known signet type from Knossos.<sup>161</sup> It is because of these considerations that I have suggested for the mitra from Axòs a representation in which Apollo appears associated with elements inherited from a pre-Hellenic divinity with which he was identified there, in a period so archaic that his classical personality and aspect had not yet been fully evolved on the island of Crete and were still imbued with Minoan traditions and creeds. Is this suggestion really so daring and complicated as it may seem?

Unlike Athena, Apollo originated outside Crete. Among the many hypotheses in regard to his origin the most likely considers the god, who returns every year to Delphi from his journey to the Hyperboreans, as a northern god imported by the Greeks in their migration to their historical land. Whatever the theory of his origin, he came in contact with Cretan religion relatively late, but not so late as to avoid undergoing a profound transformation of his nature because of the persistence of that religion. In my publication of the mitra I have hinted at several elements which, by common consent, were derived by the cult of Apollo from the religion of Crete.<sup>162</sup> It is now generally conceded that Apollo Pythios at Delphi was not the first to be worshipped on that site, but that he was merely an invader at Pytho; furthermore, many elements and attributes of the cult show a character alien to the god's nature. The cults of the sky-father Zeus, of the earth-mother (Gaia, Themis), as well as that of their offspring Dionysus preceded the cult of Apollo on this site. The Python, guardian of the shrine, killed by Apollo, as well as the other chthonian element, the underground spring from which the prophesying priestess drank, the

<sup>158</sup> According to tradition, Miletus in Asia Minor was founded at the end of the Mycenaean age by this Cretan town. The cult of Delphinios was also sent there from Crete, and was later transformed into the celebrated sanctuary of Apollo Delphinios. This cult had had its center in Knossos, but there is also evidence for it in other towns of Crete, among which was probably Milatos itself, and also Axòs. From these towns votive offerings were sent to the sanctuary at Miletus in historical times. See G. Kawerau and A. Rehm, *Das Delphinion in Milet*, Berlin, 1914, p. 407 (*Milet* i, 3).

<sup>159</sup> Bossert, *op. cit.*, fig. 186.

<sup>160</sup> *Early Hell. Pottery of Crete*, pl. x, 1; cf. *Arkades*, p. 529.

<sup>161</sup> *PM.* ii, p. 809, fig. 528; iii, p. 463, fig. 323.

<sup>162</sup> Nilsson, *Griech. Feste*, pp. 97 ff.; Wolf Aly, *Der kretische Apollonkult*, Leipzig, 1908; M. H. Swindler, *Cretan Elements in the Cult and Ritual of Apollo*, Diss. Bryn Mawr, 1913; Cook, *Zeus* ii, pp. 193 ff., 231 ff.; Nilsson, *Minoan-Mycenaean Rel.*, p. 505 f., etc. On the northern origin of Apollo see the recent paper by Krappe, "Ἀπόλλων Κύνος," *CP.* xxxvii, 1942, pp. 353 ff.



laurel tree, the leaves of which were chewed by the priestess, and the ecstatic method of divination: these are all foreign elements introduced into Apollo's myth. Whence they were derived is indicated by Greek legends which tell us about the foundation of the cult at Delphi. Even details of the legends referring to the establishment of the oracle point in the same direction. Goats grazing on the hill at Delphi, according to these legends, were overcome by fumes issuing from a chasm, and began to jump about as if drunk, uttering strange sounds; their shepherd, upon intervening, was himself overcome by fumes, and began prophesying. The shepherd's name was Koretas, a word obviously to be connected with the Cretan Kuretes. The laurel tree at Delphi may itself have been originally a prophetic tree, like the oak tree at Dodona. Therefore, even if Apollo was from his origin a god of divination, he at any rate took possession upon his arrival at Delphi of an oracle already existing on the spot, of Cretan origin or at least influenced by Crete from early times. Delphi was also the greatest sanctuary of expiation, the place of the most effective purifying practices, as well as of the most celebrated oracle of Greek antiquity. The nature of Apollo, the luminous god, is above all that of a healing god. And again the Apolline legend, literary tradition and archaeological evidence concur in indicating Crete as the place whence this quality was derived by Apollo. Long before Orestes and other illustrious sinners of Hellenic mythology had recourse to Apollo to find purification for their misdeeds, legend informs us that Apollo resorted to a soothsayer from Crete, an obscure figure called Karmanor, in order to be absolved from slaughtering the Python. Prophetic practices, in fact, are associated with purifying practices in primitive religion. The primeval μάντις is a ἰατρόμαντις. Mantic art is one of the early aspects of medical art, which is called healing from diseases as well as from miasma, the contamination of blood crime; an art that makes use of rites and formulas of sorcery, of magic clauses and songs, as well as of prophetic practices. Another of these mythical soothsayers and diviners of Crete was Polyidos, that is, "the one who knows much." We are told that he revived Glaucus, the son of Minos and Pasiphaë, who was killed as a child by falling into a pithos. Minos obliged the diviner to teach the mantic art to Glaucus, but the diviner before departing made his pupil lose this art by means of a magic device (to be precise, by spitting into Glaucus' mouth). This story reaches us only in the late accounts of Apollodorus and Hyginus, but it is certainly of very ancient origin. It was still so much cherished at the time of the great dramatists as to inspire them in their tragedies; and an exquisite artistic representation of it is preserved in the white-ground cup by Sotades in the British Museum.<sup>163</sup> Crete was considered the land of sorcerers and miracle workers even in historical times. Certainly Epimenides, called the "new Kurete," was a historical personage. He was called, about the time of Solon, to profess his art on various sites in Greece, and according to Plutarch, was asked to cleanse Athens from the pollution contracted from the conspiracy of Cylon. So deeply rooted was the island's fame in the science of magic and prophetic practices, that as late as the sixth century B.C. Onomakritos the Locrian, one of the most celebrated Orphicians, who lived at Pisistratus' court, went to the island to spend some time κατὰ τέχνην μαντικῇν.

<sup>163</sup> On this myth see Persson, *Rel. of Greece in Prehistoric Times*, pp. 9 ff.



The tripod is neither necessarily, nor was it originally, associated with prophetic function. On the contrary, I have noted the intrinsic discrepancy between the use of the tripod—an object to be put over the fire—and the use of it by Apollo or the Pythia as a seat from which to prophesy. Furthermore, I have shown that representations with figures seated on a tripod are all considerably later than the origin of the myth itself. The earliest mention of a tripod in this function refers to Triton foretelling the future while seated upon the vessel. It is about half a century later than our mitra, dating about the end of the seventh or the beginning of the sixth century B.C. It may be that association of the tripod with prophetic function comes from an ancient tripod-altar, the basin of which was supported by a central stem, symbolizing a sacred pillar. This kind of tripod-altar is supposed to have persisted until the classical age in the peculiar shape of the famous tripods of Plataea and Delphi, the latter being supported by a coil of three serpents as the central stem. In this case Apollo, seated on the mantic tripod, would be imagined as virtually sitting on top of a sacred pillar, and comparable with the image of Zeus enthroned on the summit of his sky-pillar.<sup>164</sup> I have suggested that the soothsaying Apollo derived the tripod, in its simplest original shape, from purifying performances closely connected with this mantic power. The use of a caldron and tripod in practices of sorcery persisted in the classical age. It appears in the myth of, no less than in well known representations of, the legend of Medea.<sup>165</sup> The tripod is the obvious instrument of the soothsayer in his function of *τερατοσκόπος*, and for his performances requiring intoxicating fumes which produced the sleep of revelation. The relationship between ritual and orgiastic dances and the use of the tripod is evident for the time in which we are interested from the presence of four tripods near a representation of such a dance on a fine geometric vase from the Dipylon.<sup>166</sup> Apollo certainly inherited this attribute from the cult established before his arrival, together with many other elements some of which we have mentioned earlier. Numerous monuments of pre-Hellenic religion reveal the presence of the cult of the sacred tree, as well as orgiastic dances. The latter were accompanied by music. The important rôle of music in Cretan religion is one of its many indisputable features. Thaletas and Linos, the greatest musicians of Hellenic mythology, were Cretans. From the same pre-Hellenic religion Apollo probably derived the omphalos, through the preceding cult of Gaia. Miss Guarducci contends that the tripod as the instrument and symbol of oracular science was taken over from the Greek mainland. She concedes that this object was not unknown to the Minoan world, at least in its latest phase, but only "as a domestic object." As a matter of fact, we can, with relative precision, follow its rise in Crete and its evolution, from the simple bronze lebes on a stand of different material, to the bronze tripod with feet attached to the basin, and to the almost simultaneous creation of a kind of three-footed hypocraterion ending in an empty ring over which the bronze lebes rested. The origin of the tripod with fixed feet goes back to a relatively early age, certainly not later than the fourteenth century B.C., the period to which the well known specimens from the tomb at Zafer

<sup>164</sup> See Evans, *JHS.* xxi, 1901, p. 117 f.; Cook, *Zeus* ii, pp. 193 ff.

<sup>165</sup> See Seeliger in Roscher's *Lexikon*, s.v. *Medeia*, col. 2505 f.; Leski in *RE.* s.v. *Medeia*, col. 59 ff.

<sup>166</sup> See Ohnefalsch-Richter, *op. cit.*, pl. cxxxii, 1.



Papoura belong. They are still very primitive, with low, squat feet. There is no reason for affirming an exclusively domestic character for one or the other type for which so many examples were found in tombs or "treasuries," e.g. the magnificent bronze tripod from the treasury of Tiryns.<sup>167</sup> On the other hand, it is certain that the tripod was used from the beginning for sacral purposes. Irrefutable evidence is provided by some pressed glass plaques from Mycenae (fig. 18, p. 300)<sup>168</sup> on which we see Minoan demons pouring a sacral libation over one of these tripods.

We have seen how Apollo, brought by the Greeks in their immigration, was identified by them with a divinity of the pre-Hellenic pantheon from whom he derived a number of elements and attributes. As we have observed for Athena, and it is true for other divinities, it is quite likely that he did not assume completely the nature and aspect of his forerunner, whose other elements may have passed to other gods of the Greek pantheon. It is not strange, therefore, that on the island which had been the cradle of pre-Hellenic Cretan-Mycenaean religion, and at a time when the figure of Apollo had not yet sharply emerged in Greek religion, a Cretan representation may still preserve some elements characteristic of Apollo's forerunner, but which later disappeared from the definite image of the Hellenic god. There is nothing extraordinary in this idea, and it is indeed suggested by several traditions and legends preserved in Hellenic literature. The discovery of remains of many tripods in the cave dedicated from time immemorial to the cult of a god, identified by the Greeks with their Zeus, suggests what so many other sources confirm, that Apollo drew his purifying quality, as well as other attributes listed above, from the chief god of Minoan religion. On the other hand, we may observe that, in spite of the assignment of these attributes and qualities to Apollo, following the differentiation of the many-sided nature of the supreme Cretan god which took place in the sphere of Greek religion, there are in some special cults of Zeus traces of those original qualities even in the classical age. Strabo (*Geogr.*, 468) tells us that in Crete the cult of Zeus was celebrated μετ' ὀργισμοῦ. A mantic power was preserved for Zeus in cults of primary importance, in that of Zeus Trophonios, as well as in the celebrated sanctuary of Dodona, in which the prophesying oak tree recalls the widespread Minoan cult of trees. An oracle of Zeus Klaros is mentioned at Kolophon. Its name makes clear that it was at Klaros that the cult of Zeus, brought over from Crete to Asia Minor in very early times, found its greatest influence. Both in Klaros and in Miletus the cults of Zeus and Apollo seem to be equally ancient; only later legends, arranged by logographers, tend to emphasize Delphic participation in the foundation of the famous oracle of Klaros. But the fact that some traditions inform us that Zeus had possessed an oracle on sites where later on Apolline revelation triumphed, is proof that Chronos' son came to Ionia as a prophet.<sup>169</sup> Moreover, the association of Apollo with the cult of Zeus is clearly evident even at Delphi. Here Zeus Polieus had a precinct adjoining that of Athena Pronaia at the very entrance of the town. Within the sanctuary of Apollo, Zeus Moiragetes was represented side by side with Apollo Moiragetes (the latter god probably deriving his name from the former)

<sup>167</sup> Karo, *AM.* lv, 1930, p. 132, fig. 4, Beil. xxxiii.

<sup>168</sup> *PM.* iv, p. 454 f., fig. 379 a; Cook, *Zeus* ii, pp. 193 ff., fig. 133.

<sup>169</sup> See C. Picard, *Ephèse et Klaros*, Paris, 1922, pp. 402 ff., 458 ff., 550 ff.



next to the statues of the two Moirai. Another Delphic cult of Zeus, furthermore, postulates incubatory practices. This is the cult of Zeus Euhypnos, the "giver of good sleep." The same practices are confirmed in another, certainly very ancient cult, that of Zeus Amphiaraos at Oropos. The famous Delphic phratry of the Labyadaei made sacrifices in the month of Boukatios to Zeus Patroios as well as to Apollo, and also swore by the former god. To sum up in a few words all the data provided by these cults, extensive literary evidence indicates that at Delphi there was a vivid consciousness that Apollo the seer was, so to speak, nothing more than a hypostasis of the supreme Cretan god identified by the Greeks with their Zeus. Therefore Apollo was called the son of Korybas; and for the same reason the god, represented on classical monuments seated on the tripod in the customary garb of Zeus, was conceived as a prophet of the supreme god. Διὸς προφῆτης δ' ἔστι Λοξίας πατρός, as Aeschylus says (*Eum.*, 19).

Thus it need no longer surprise us to find in an image of the earliest cult of Apollo in Crete an association of ancient elements which passed from the chief Cretan god to the classical Hellenic cult, and others which, on the contrary, were later dropped. These are the weapons of the warlike divinity, and the animals of the god of nature.

We have mentioned the pre-Hellenic god as a god of war, holding his weapons, including the spear, sword, bow and shield. The classical Apollo has as a characteristic weapon, the bow, which darts the cleansing arrows, proper to the nature of the healing god. Other weapons, however, also appear as part of his inheritance from his forerunner in a number of traditions, epithets and cults. Again, it is incorrect to say that he is armed only when he is described or represented in battle against his enemies, e.g. fighting with his sword against Tityos and against the Giants.<sup>170</sup> I have already listed some classical references describing, and some coins depicting, the god armed with different defensive and offensive weapons, such as the shield, sword, spear, and even double-axe, the ancient weapon of the Cretan Zeus.<sup>171</sup> It is interesting to point out that Chrysaor, the common Homeric epithet of Apollo, is related only to a cult in Caria, that of Zeus Chrysaoreus of Stratonikeia. In spite of many sophistications<sup>172</sup> the most obvious meaning of the word is "with the golden sword." The sword as a weapon of Hellenic Zeus, appears both in literature and art.<sup>173</sup> It is not at all surprising to find some elements pertaining to the main pre-Hellenic god in representations belonging to the dawn of the Apollo cult in Crete, since as late as the classical age we may notice in another cult elements apparently alien to his better known Hellenic cults and to his nature as a whole. Apollo Tharraios of western Crete<sup>174</sup> shares with Zeus the legend of the miraculous nourishment of a baby by an animal, either a dog or a goat. Several coins of Crete, especially from Kydonia but also from other sites, preserve this legend, here referring to the nymph Acacallis, Minos' daughter. In the myth of Zeus the story is connected with the

<sup>170</sup> See Roscher's *Lexikon*, s.v. *Tityos*, col. 1040 ff., and s.v. *Giganten*, col. 1653 ff.

<sup>171</sup> The double-axe is one of the few objects of pre-Hellenic religion which may almost certainly be said to pass to Hellenic religion in association with ritual ceremonies connected with it. On the double-axe and the ceremony of the Bouponos see Farnell, *Essays in Aegean Arch.*, loc. cit., p. 22. Cf. also my observations in *Annuario* vi-vii, pp. 7 ff.

<sup>172</sup> See especially De Waele, *Musée Belge* xxviii, 1924, pp. 47 ff.

<sup>173</sup> Cook, *Zeus* ii, pp. 712 ff.

<sup>174</sup> See Aly, *op. cit.*, pp. 43 ff.



she-goat Amaltheia. The probable derivation of both versions from a single source in pre-Hellenic religion is likely, as is indicated by a seal-impression from Knossos on which a baby seems to be suckled by a she-goat.<sup>175</sup>

Two birds resting on the rings of the lebes of the Axòs mitra may be interpreted either as living birds, representing the god's epiphany in the garb of his symbol, in addition to the representation of the image of the god himself, or as the usual decoration of basin handles in the shape of birds. I have ventured the suggestion that this very early Hellenic decoration of tripods is nothing more than a stiffening, in ornamental guise, of preceding naturalistic images of divine symbol.<sup>176</sup> The symmetrical disposition, as well as the date of the mitra, in which this kind of decoration had already become a common one, may persuade us toward the second hypothesis. At any rate, we cannot deny the animistic spirit of the Cretan artist, extending not only to the lively naturalistic representation of bird forms, but even to the unique detail of the peculiar transformation of the junction of the handles with the basin, junctions shaped like bent legs of birds. These characteristics, at any rate, reveal the clear consciousness of the derivation of the ornamental birds from earlier images of living creatures. For this detail, too, we may turn to Cretan-Mycenaean art. A bronze tripod from the treasury at Tiryns, mentioned earlier, also transforms the suggestion of the god's epiphany in the shape of a bird into a decoration—still much livelier than those of Hellenic art—by means of a row of birds hanging from chains under the ring of the hypocraterion in alternation with pomegranates.<sup>177</sup> Of course, even if the birds are considered a living symbol of the divinity, this is by no means an argument supporting the interpretation of Athena for the human image on the mitra. It is quite true that an epiphany in the form of birds is also represented for Athena; and it is equally true that the special symbol of the owl<sup>178</sup> is associated

<sup>175</sup> *PM.* i, p. 273, fig. 202 e.

<sup>176</sup> This Hellenic decorative element probably also finds precedents in the bronze age. Birds rest symmetrically and with an evident ornamental arrangement on the edges of terracotta tripods, tetrapods and bowls of the bronze age from Cyprus: see Ohnefalsch-Richter, *op. cit.*, p. 274 f., figs. 181–86, pls. CXLIX, 15 and CLXX, 13.

<sup>177</sup> The symbol of the pomegranate has recently appeared in the closest association with the goddess, that is, on the headdress of one of the idols from Gazi mentioned previously.

<sup>178</sup> On this attribute of Athena see Nilsson, *Minoan-Mycenaean Rel.*, pp. 423 ff.; Cook, *Zeus* iii, pp. 776 ff. As to why the owl among all birds became the goddess' symbol, Nilsson has suggested more than once that this association occurred merely because the owl was the bird continuously seen and heard on the Acropolis of Athens. The answer came to him after having heard in many a spring evening the sounds of small owls which nested in the crevices of another acropolis of Athens, the acropolis of Lindos, during excavations in that town by the Danish expedition. It is a fact that the simplest answer is often the truest: but not necessarily. This solution, in fact, does not silence objections offered long ago by Pottier (*BCH.* xxxii, 1908, pp. 529 ff.). The owl is not a bird particularly characteristic of the Acropolis of Athens. It may be found anywhere in towns of Greece, and it might have been chosen as well for the symbol of other divinities. The owl appears on coins as a symbol of Athens before Athena's image, and only later were the two symbols associated. Furthermore, the earliest association of Athena with the owl does not appear on products of Athens. Therefore, Pottier's hypothesis is more likely, that the symbol of the owl, before belonging to the goddess Athena, was used in Greece and at Athens itself as one of many symbols having a prophylactic value, as a fetish of magical power for averting evil influences. Also this symbol was obviously derived from the pre-Hellenic civilization of Crete. It is not entirely correct to say that it can never be seen in this civilization. We may recall e.g. a fine seal impression from Knossos, on which four owls are arranged cross-like, with a strange resemblance to the arrangement on an Attic coin centuries later (*PM.* i, p. 695 f., fig. 518 f.; iv, 2, p. 487, fig. 410 a-b;



with the goddess only at a very late date, not before the time of Pisistratus. In Homer the goddess appears in her epiphany in many bird forms: that of a pigeon, swallow, vulture, hawk, kite, shearwater, or undetermined bird. There is no doubt that Athena's epiphany in the form of a bird is only one more among many elements in the cult of the goddess derived from Cretan-Mycenaean religion, where this sort of epiphany seems to be associated with various divinities. In the ritual of Delphi, *theophania* was the name of a festival in which the return of the youthful Apollo from his sojourn in the country of the Hyperboreans was celebrated.

The problem presented by the mitra of Axòs is no longer whether it is possible that the image of Apollo could be combined with some elements belonging to the cult of the supreme Cretan god. It is rather, why we have interpreted the image as that of Apollo, and not that of Zeus, who for a long time preserved the quality of a prophetic god which in Hellenic religion became peculiar to the cult of Apollo. The ephebic aspect of the god of the epiphany, the date of the mitra, a time in which the cult of Apollo was already sufficiently established, the legends referring to Axòs, as well as the numismatic evidence (fig. 19 a-c),<sup>179</sup> account for our choice in interpretation. The eponymous hero of our town, Oaxos, was considered a son of Apollo and of the nymph Acacallis, whom we met shortly before. On coins of the town the beardless and laurel bedecked image of Apollo is the one prevailing from the earliest types, in the fourth century B.C. But from this evidence it is also clear that there was always a vivid consciousness of the derivation of Apollo's mantic power from his forerunner, because of which Apollo is called Διὸς προφήτης. There are other coins, contemporary or only slightly later than those mentioned, in which we again find the tripod on the reverse, but this time with Zeus on the obverse. Furthermore, the tripod is associated with Zeus' thunderbolt. As a matter of fact, these coins of Zeus tend to prevail in a more advanced phase. But more important for our study is the fact that thunderbolt and tripod are associated even on coins where the image of Apollo appears on the obverse.

Cook, *Zeus* iii, p. 790, fig. 588). The symbolical meaning of the bird in Crete, at least since the dawn of the Hellenic age, is made evident by the discovery of a great number of owls in terracotta and other materials (*Arkades*, pp. 547 ff.). An owl in stone may perhaps go back even beyond the beginnings of the Hellenic age, while a fragment of a bronze owl was found among votive offerings in the Idaean cave. Confirmation that this symbol belonged to a pre-Hellenic divinity of Crete may be indicated by the fact that in Phrygia the owl is still the attribute, not of Athena, but of Zeus (Cook, *Zeus* iii, p. 794, figs. 592-94; cf. p. 734, note 1). In Oriental religions, related in so many elements to Minoan, there is evidence that the owl was considered a bird of ill-omen, at least by the Assyrians. A recent very interesting discovery reveals the fact that the symbolic value attributed to the owl was embodied in a goddess as early as the Sumerian age. The figure appears on a Sumerian relief in baked clay, dated at the end of the third millennium B.C. It represents a nude goddess (perhaps Lilith?), standing on two lions; the goddess has owl's wings and legs, and is flanked by two owls in full face (Cook, *Zeus* iii, pp. 832 ff., pl. LXI).

The preceding considerations have not yet clearly answered the question why and with what meaning the owl in Greek religion became Athena's attribute. Pottier's explanation still remains perhaps the most satisfactory: the glance of the warlike goddess shines like that of the owl; it terrorizes the enemy in the battle. The owl itself is an unlucky omen, announcing evil and death. The discovery of many fictile owls in the tombs of *Arkades* led me to accept a funeral meaning for the early Hellenic symbol. Perhaps a similar meaning may have been connected with the owl mentioned in the legend of Glaucus and Polyidos. The tale speaks of an owl perched in a wine cellar, drawing off the bees from the entrance; the seer understood this sign, and extracted the boy, lifeless, from the honey vat.

<sup>179</sup> J. N. Svoronos, *Numismatique de la Crète ancienne*, Macon, 1890, pp. 33 ff., pls. II, 30-III, 14; *Inscr. creticae* ii, pp. 42 ff.



Thus the Axòs mitra is one of the most important monuments contributing to our knowledge of the personality of the Hellenic gods in the twilight between the end of the old Cretan-Mycenaean world and the triumph of classical Hellenism. The mitra, as well as another monument made known after the publication of the mitra, that is, a pithos lid from Knossos (fig. 20),<sup>180</sup> helps to determine the moment when Apollo's physiognomy reached a distinct outline, after the period of its laborious formation. These monuments support the theory that a third and still



FIG. 20. — PITHOS LID FROM KNOSSOS  
(Original photograph)

powerful wave of influence was exerted by the religion of Crete in the formation of the Hellenic religious world, near the final decline of the island's pre-eminence in the history of civilization, that is, at the close of the ninth century. To this post-Homeric phase must indeed be attributed the migration of Apollo Delphinios from Crete to Delphi, the transmission of the purifying ritual and many other elements and attributes, mentioned earlier, to the cult of Apollo from the pre-Hellenic religion of Crete.<sup>181</sup>

The pithos lid from one of the rich tombs of Fortezza near Knossos is *calotte-*

<sup>180</sup> *EHPC*, pl. xxviii, 3.

<sup>181</sup> See Farnell, *Essays in Aegean Arch.*, loc. cit., p. 25 f. The two preceding periods of influence according to him are an early, purely Cretan, or Minoan period, and a second, still pre-Homeric, but one in which a wave of Dionysiac cults had already reached the island, probably from Phrygia.



shaped, with a plastic cow head, decorated on the forehead with a rosette of pure Minoan tradition, as the central knob. One quadrant of the outer surface of the lid shows a figure representation which interests us; the opposite quadrant has a scale pattern, and the other two, geometric elements. No element supports Marinatos' attribution of the lid to the early orientalizing style. On the contrary, the loose and unrestrained arrangement of the purely geometric elements shows that the complete organization of the geometric style is not yet at hand. The body is in silhouette, except for the rendering of the head in simple outline. The contour lines of the head are thick, the indication of the features coarse, with a big inner dot for the eye. We are in a phase still preceding the first transformation toward the "Hellenic" structure of the human countenance. Equally primitive is the representation of the single body of the scene, which belongs to a "naïve" style. According to our sketch of the evolution of the human form in the early Hellenic art of Crete, this lid appears much earlier, e.g., than the still very archaic stage of art of the cylindrical urn from Arkades showing a woman on a stand preceded by a man.<sup>182</sup> The representation on the lid shows a male figure energetically walking to the right, approaching a tripod with several rings rising from its basin. I have suggested elsewhere a precise interpretation of this scene;



FIG. 21.—BOSTON, MUSEUM OF FINE ARTS: PROTCORINTHIAN ARYBALLOS

(Johansen, *Vases Sicyoniens*, p. 146, fig. 109)

I do not believe it necessary to share the excessive skepticism of scholars who have dealt with it before. Another epiphany of a divinity is undoubtedly indicated by the birds, one of which rests within the basin itself, while a second is on the outstretched left arm of the figure and a third one on the ground between the figure and the tripod. It is a divine figure, the name of which is revealed by the object held in the left hand: it is the thunderbolt, in a still rather uncertain shape, but already very similar to the shape it shows in another very interesting diminutive representation, where it is seen again in the hand of the divinity: the Protocorinthian aryballos from Boston (fig. 21).<sup>183</sup> The figure holding a sword, spear and lightning, fighting against a centaur armed with a branch, can be called Zeus without hesitation, in spite of the many different interpretations suggested for it. On other, no less early, monuments, such as the relief pithoi from Rhodes, the same god fighting against similar centaurs brandishing branches still holds the double-axe, the characteristic weapon of the ancient Cretan god; on other pithoi, however, he fights with a sword, or both sword and double-axe. There is no need to see in this representation a specific scene from Greek legend: the god fighting fantastic, half-human and half-animal creatures, the wild θῆρες of the mountains,

<sup>182</sup> *EHPC*, pl. IX, 1.

<sup>183</sup> K. F. Johansen, *Les Vases sicyoniens*, Copenhagen, 1923, p. 146, fig. 109, pl. XXII, 2.



may rather produce another form of the supreme god, the subduer of the forces of nature, in alternation with the Master of wild beasts and monsters flanked by his animals or fantastic creatures in heraldic positions. On the toilet bottle in Boston we see beyond the centaur an object, which was correctly understood as another form of caldron, that is, a spacious lebes of orientalizing type rising above a conical stand: both types of caldrons, the one just mentioned and one in the form of the Delphic tripod, appear together, associated with the image of a griffin, in the decoration of a Protocorinthian aryballos in Berlin.<sup>184</sup> On the toilet bottle in Boston the theophany of the chief god is indicated by two eagle-like birds flying in the middle of the field as well as by two more birds symmetrically opposed on the rim of the caldron, the latter already recalling the decorative elements of the Delphic tripod. One last element in the representation of the lid from Knossos can, in my opinion, be very satisfactorily explained. In connection with the bust seen between the legs of the tripod I recalled the five bronze tripods seen by Pausanias in the



FIG. 22. — TETRADRACHM  
FROM MESSENE  
(Cook, *Zeus* ii, p. 1222, fig. 1020)

precinct of Apollo at Amyclae, the Laconian town celebrated for this shrine (Paus. iii, 18, 4). Three images of goddesses, Aphrodite, Artemis and Kore, were placed under the three biggest and earliest of these tripods, as votive offerings attributed by tradition to the spoils from the First Messenian War, which ended in 724 B.C. (Paus. iv, 14, 2).

In spite of the primitiveness and coarseness of the figure of the god on the lid from Knossos, I do not see any place for reticence in putting this image at the head of a long and glorious series of monumental works of Hellenic art. The same image of Zeus striding to the right, holding the thunderbolt in his left hand and with a bird resting on the left arm stretched forward, appeared in a statue seen by Pausanias at Olympia (*Paus.* v, 22, 5), an offering of the Metapontines, the work of Aristonous from Aegina, certainly anterior to the conquest of Aegina by the Athenians in 458 B.C. This is the image seen on some rare staters from Olympia, attributed respectively to 471, 452 and 432 B.C.<sup>185</sup> The celebrated Zeus Ithomatas, made by Hageladas for the Messenians of Naupaktos, and represented on several silver coins of Messene of the fourth century B.C., was probably in the same position. The same image, destined to a long life in the history of Greek art, appears on a number of different monuments, including statuettes, painted vases and coins. The association of Zeus with birds was naturally derived directly from the divine epiphany of pre-Hellenic religion, in the same way as the parallel association of Athena. Doves are indeed connected with several oracular cults of Zeus, mentioned previously: the cult of Dodona, as well as that of Zeus Aphytis and that of Heliopolis in Syria, those of Nubia, at Thebes, in the oasis of Siwah, and so on.<sup>186</sup> Finally, a monument of classical art, a tetradrachm of Messene of which only two specimens are known

<sup>184</sup> *Ibid.*, pl. v, 6 a-b.

<sup>185</sup> Cook, *Zeus* ii, pp. 739 ff. (for the staters from Olympia, p. 741, figs. 670-72); p. 1222 f. (for the tetradrachm of Messene, p. 1222, fig. 1020).

<sup>186</sup> Cook, *Zeus* i, p. 352.



(fig. 22), again brings us the image of the striding Zeus accompanied by the symbol of his epiphany in the form of the bird resting on his arm, a bird this time specified as Zeus' eagle. Here the god holds a long scepter in his left hand; and this time again, as on the primitive lid from Knossos, there is under his arm a tripod, the symbol of his primeval purifying and mantic power.

Between the time of the lid from Knossos and the mitra from Axòs there had been a penetration into Crete of the new Hellenic god Apollo, to whose heritage these functions and this character of the pre-Hellenic deity were destined to pass. These were, indeed, the elements bound to last, while other aspects and attributes, at first accepted along with them, were later eliminated, until the limpid image of the luminous god of Hellas emerged in crystalline clearness out of the mists of the Hellenic Middle Ages.

#### 4. JEWELLERY FROM THE IDAEAN CAVE

The casual discovery by shepherds of some remains of ancient jewellery near the entrance of the Idaean cave in 1885 precipitated excavations in the celebrated ancient mountain shrine of Zeus, which yielded a magnificent deposit of laminated bronzes. During the actual excavations, entrusted by the Syllogos of Candia to young Federico Halbherr, new discoveries of jewellery were very scarce.<sup>187</sup> Nor has any find of early Hellenic jewellery appeared elsewhere in Crete since that time to balance even partially the hoards offered by Cyprus, Rhodes and Ephesus. Many years after the excavation, the Museum of Candia secured from dealers a fragment of a gold open-work plaque said to have come from the cave of Zeus. It shows the remains of a woman in front view, flanked by two male figures represented in profile. The fragment was published almost simultaneously by Picard and myself, while some years later a new and more detailed study was dedicated to it by F. Chapoutier.<sup>188</sup> During a visit to the National Museum in Athens, after the publication of *Arkades*, I recognized two more small fragments of the plaque in Candia, in a group of unpublished gold objects, badly exhibited at the bottom of a glass case (figs. 23-23 bis). The new fragments almost complete the lower part of the left figure, as is shown in fig. 29. A hasty search in the Inventory of the National Museum disclosed that both the new fragments and the entire group of jewellery belong to finds from the cave on Mount Ida. This origin is confirmed by a superficial examination of the objects. I am glad to tender to the Directors of the National Museum thanks for their kind permission to photograph and publish these fragments.

The admirable gold hairpin corresponds to a similar pin—the most important gold object found by Halbherr.<sup>189</sup> Both have a head in the shape of a large disc,

<sup>187</sup> See *Museo Ital. di antichità classiche* ii, 1888, col. 749 ff.; cf. Fabricius, *AM.* x, 1885, p. 67 f. Miss B. Segall informs me that the largest piece of the group of jewellery in Athens studied in the following pages has been reproduced by Maria Ruxer in the *History of the Greek Necklace* published in Polish in 1938 by the Polish Academy. No copy of the book is, to my knowledge, available in an American library.

<sup>188</sup> *Arkades*, p. 708, fig. 670; C. Picard, "Πότνια 'ἀνδρῶν τε θεῶν τε'," *Rev. de l'hist. des rel.* xcvi, 1928, pp. 60 ff., pl. i, 1; F. Chapoutier, *Les Dioscures au service d'une déesse*, Paris, 1935, pp. 211 ff., fig. 28.

I wish to thank Mr. Ransom R. Patrick, A.B., for the new drawing of the plaque, fig. 29, as well as for the drawings of fig. 24.

<sup>189</sup> *Loc. cit.*, fig. on col. 753.



decorated by a rosette with a protruding central knob, but on our pin the big bulb on the neck is shaped like a flattened spherical bead instead of being biconical. This bulb is cut by vertical incisions, as are the corrugations on both sides of it, separated from each other by rings. This type of pin with disc-shaped head <sup>190</sup> finds parallels at Arkades,<sup>191</sup> the specimens from this site being in iron, however. The same shape is seen at Praisos, from which site we may also mention a silver pin of slightly different form, with much smaller head, but one similarly decorated with a stamped rosette.<sup>192</sup> Arkades also provides a parallel for the smaller gold pins, to the right of the big one in our fig. 23.<sup>193</sup> The small tube threaded near the head of a pin of middle size between the two former examples is peculiar. It may have been destined for the insertion of a second pin, smaller than the one preserved, according to the custom of coupled pins often found in this period, e.g. in the sanctuary of Artemis Orthia at Sparta.<sup>194</sup> Or it may have been provided for the passage of a small gold chain through it for the purpose of hanging it, or fixing it to another pin. Fragments of the chain may be those seen near it in our photograph. Chains are more usually fixed in this period to a bulb on the stem of the pin.<sup>195</sup>

We shall pause for a moment over this class of toilet objects to mention one more beautiful specimen which has recently joined those previously found in Crete. It is the silver pin of fig. 24 a, also found at Arkades, either stolen during the excavations or found in earth removed from the excavations, if we may believe the peasant who sold it to the Candia Museum. This specimen differs from the gold pins of the Idaean cave, inasmuch as its disc-shaped head has a straight vertical rim as well as a strongly projecting central knob. Similar examples, not so conspicuous, had previously been found in Crete in the Psychrò cave.<sup>196</sup> Our pin represents a stage of evolution similar to the gold ones examined, with one single bulb on the stem, that is, an intermediate phase preceding the similar but richer and more complicated shapes, often showing a tongue pattern moulded on their bulbs and on the edge of the disc, and sometimes with the knob worked out in plastic form, like the lion's head on a pin of the late seventh century from Sparta.<sup>197</sup> A fine silver pin from the same site has a similar shape, but with a flattened knob, and with a moulded rosette on the disc of the head.

A second object found in the dumped earth of the excavation at Arkades was bought by the Candia Museum, that is, the lentoid amber seal of fig. 24 b.<sup>198</sup> This

<sup>190</sup> The shape with large disc-shaped head and with many corrugations of about the same size on the stem, disappears at Sparta near the end of the eighth century B.C. Our shape, with a single slightly larger bulb, represents a stage intermediate between the preceding and the shape of the seventh century with two or three large bulbs on the stem. See *Artemis Orthia* (hereafter referred to as *AO*. pp. 197, 200).

<sup>191</sup> *Arkades*, pl. IX, p. 18; cf. p. 470 f.

<sup>192</sup> *BSA*. viii, 1901-02, p. 244, fig. 13. This decoration is also common outside Crete: cf. C. Waldstein, *The Argive Heraeum* (hereafter referred to as *AH*.) ii, Boston, 1905, pl. CXXXVII.

<sup>193</sup> *Arkades*, pl. XII, p. 48.

<sup>194</sup> *AO*., pp. 200, 257, pl. CLXXX, 23-24.

<sup>195</sup> *Ibid.*, p. 200. On pins of the Mycenaean age the chain could be fastened either to a pierced bulb on the stem or to a small ring on the middle of the stem: Brit. Mus., F. H. Marshall, *Cat. of Jewellery*, London, 1911, pl. IV.

<sup>196</sup> *BSA*. vi, 1899-1900, p. 112, fig. 45.

<sup>197</sup> *AO*., pls. LXXXVII c-d; CCH, 6; cf. *AH*. pls. LXXXI-LXXXII.

<sup>198</sup> No. Inv. 275. Width, 0.015 m.; height, 0.012 m.; thickness, 0.004 m. The gem is pierced longitudinally. The color of the amber is a dull, coffee-reddish. It shines only in the crack, which broke the gem into two almost equal parts.



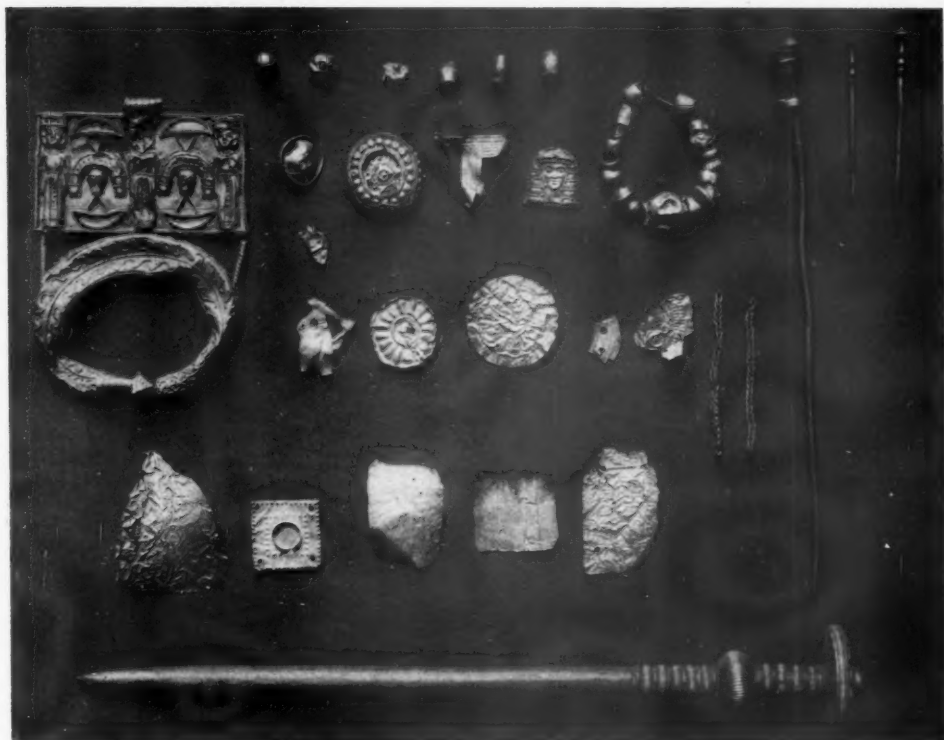


FIG. 23.—ATHENS, NATIONAL MUSEUM: JEWELLERY FROM THE IDAEAN CAVE  
(Original Photograph)



23 *vis.*—ENLARGED DETAIL OF  
FIG. 23  
(Original Photograph)

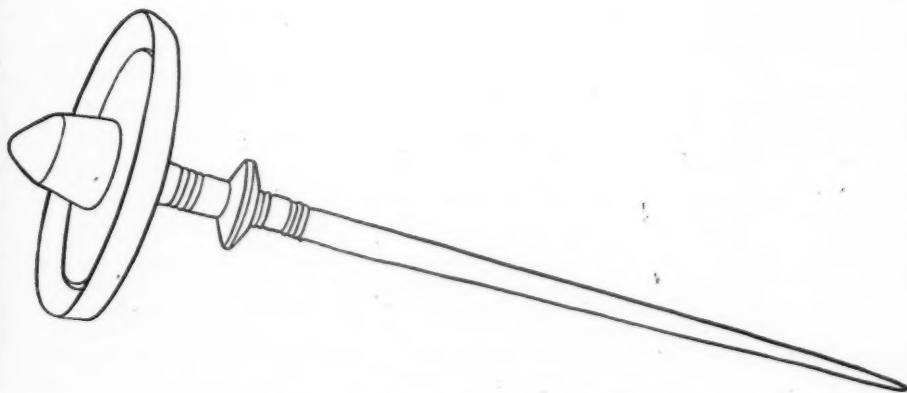


FIG. 24 A.—SILVER HAIRPIN FROM ARKADES  
(Original Drawing)



FIG. 24 B.—AMBER GEM FROM ARKADES  
(Original Drawing)



seal provides us with an isolated amber object of some interest, and was the only incised gem yielded by the excavation. It represents a wild goat, facing to the right, with the tail curled over the back; under the animal's head, probably a shrub. The goat is certainly the most common subject found in representations on "gems of the islands" in the late geometric and orientalizing periods of Greece. Often it is seen standing, and a stylized branch appears in the field, as on our gem.<sup>199</sup> The most common shapes of these gems are the lentoid and ovoid, the latter often imitating scarabs or scaraboids. Our seal shares the style of this class, still with remarkably lively and naturalistic forms, revealing, in spite of the summary drawing and negligence of details, a direct derivation from the brilliant pre-Hellenic glyptic art. Remarkable skill in composition is observable in our specimen. The style finds chronologically well determined comparisons at Sparta, both in carnelian gems and on ivory and bone seals and glass scaraboids, as well as in lead rings imitating gold and silver rings.<sup>200</sup> Furthermore, we may mention a round faience seal, very similar in style to ours, found in Italy and important for chronology. It shows a goat and a shrub in the field, and may be dated between the end of the eighth and the beginning of the seventh century B.C., because it belongs with materials which can be classified between the latest Etruscan pit tombs and the earliest shaft graves.<sup>201</sup>

The simplest objects in our group can be paralleled in every find of early Hellenic jewellery. Such are the simple beads in flattened-spherical shape, globular examples, those in the shape of a double truncated cone; or a flattened button, smooth or sometimes with incised striations,<sup>202</sup> some of which occur in the first row of our photograph; a button with low *calotte* shape and pearled rim in the second row;<sup>203</sup> simple rosettes, of which there are two specimens in the third row, and a fragment between the second and the third row. More elaborate rosettes have been published by Halbherr, and others are mentioned by Fabricius.<sup>204</sup> The more ornate button in the second row of our fig. 23 recalls rosettes with fine granulation mentioned by Fabricius, as well as a rosette found by Halbherr which has in the center a similar polygonal granulated decoration.<sup>205</sup> Furthermore, Fabricius lists among finds from the Idaean cave some rectangular plaques framed by bands of running spirals. The one reproduced on the right in the fourth row of our photograph may be such an example. Here, however, we seem to distinguish an all-over pattern of spirals, rather than a

<sup>199</sup> AZ. xli, 1883, col. 314 ff., pl. 16, 1.

<sup>200</sup> Cf. the resting or collapsing goat, *AO.*, p. 380, fig. 144 f.; the crouching goat, *ibid.*, pl. CLV, 6, and the grazing deer, pl. CLXI; standing animals, p. 379, fig. 143 a; standing or marching quadrupeds, p. 256, fig. 118 a, c, g, j; on the latter representation we see again a stylized shrub in the field behind a goat turning back its head. At Sparta, too, only a small fragment of a gem, and a very degenerate plastic figurine of a goat in amber, besides a few other ornamental objects were found. Amber is very rare at Sparta after the beginning of the seventh century B.C.: see *ibid.*, p. 386.

<sup>201</sup> A. Furtwängler, *Antike Gemmen* iii, p. 64, fig. 53.

<sup>202</sup> Br. Mus., *Cat. of Jewellery*, pl. ix, and the necklace from Enkomi, A. S. Murray, A. H. Smith and H. B. Walters, *Excavations in Cyprus*, London, 1900, pl. xi, nos. 160-69.

<sup>203</sup> Br. Mus., *Cat. of Jewellery*, pl. xii, 1190; Perrot-Chipiez iii, p. 838, fig. 607; M. Rosenberg, *Gesch. der Goldschmiedekunst* ii, *Granulation*, Frankfurt a. M., 1915, p. 27, fig. 39.

<sup>204</sup> PC. iii, p. 837, fig. 606; D. C. Hogarth, *Excavations at Ephesus*, pl. x, 23, etc. For other specimens recently discovered at Lapithos, *SCE*. i, pl. XLIV, 2, 94.

<sup>205</sup> *Museo Ital.* ii, col. 750, lower figure. Even more similar is the hexagonal pattern on a gold pendant in the Brit. Mus., *Cat. of Jewellery*, pl. xiii, 1159.



frame.<sup>206</sup> The two other rectangular plaques of our photograph are smooth, and so apparently is the fragmentary gold plaque to the left, on which no decoration is now recognizable. The small square plaque, with simple dotted decoration, probably had a stone or some enamel set in the central circular ring, as we shall see was the case on our larger piece. Two more fragments, in the third row, were decorated. One, which had two small holes for sewing or for fastening diminutive nails, shows only some curved lines, both continuous and dotted. The second has, to the right, an arched band cut by striations, then three oblique series of dots perpendicular to it, a small disc below these dots, and a couple of vertical lines near the left edge. Both fragments may have belonged to the open-work plaque, but at present I am not able to determine to which part of the representation.

Of the two pieces still to be discussed, the small head with coiffure of "Etagen-perücke" type in the second row is one of the most widespread motives on jewellery of this period in countries of the eastern Mediterranean. The female head (protome) appears in relief in the middle of gold plaques on trinkets from Athens, Ephesus, Rhodes, Cyprus, Delos, Megara, Aidin (Tralles) in Lydia, etc. The most imposing piece, consisting exclusively of this element, is a necklace from a tomb at Kamiros.<sup>207</sup> Four similar heads form the walls of a small square gold box from Ephesus, covered by a low conical lid.<sup>208</sup> Female heads, either in relief or applied on gold plaques, form the main decoration, in alternation with rosettes, animal heads and entire animals and creatures, such as flies, on luxurious rosettes like those in Bologna, in the British Museum and in the Cabinet des Médailles.<sup>209</sup> At other times, heads alone, without the background plaque, are parts of complex trinkets, hanging from chains, or in other ways, e.g. on an admirable trinket in the Louvre, considered a band for the forehead.<sup>210</sup> Single female protomae, hanging from a ring, could be pendants of necklaces, or have been sewn to cloth. We may mention two protomae alternating on a necklace with a Hathor head and an eye of Ra,<sup>211</sup> as well as a single head from Athens, and another gold head in the center of a necklace of glass beads in the British Museum:<sup>212</sup> in the latter specimen a heart-shaped pattern under the head probably contained an inset stone or enamel. At Sparta ivory and lead imitations of single gold protomes were found.<sup>213</sup> Our Cretan specimen shows a very refined rendering of the face, with a slightly elongated structure and a subtly smiling countenance. The granulation is very careful, with a granulated line all around the edge, and another over the forehead. Such a line around the forehead can also be noticed on some of the heads mentioned above, as well as on similar examples, such as the heads of the Melissai from Thera.<sup>214</sup>

The largest and most important piece still to be considered consists of a rectangular gold plaque with figured relief decoration. A cylindrical tube, with parallel vertical relief rings above it in the center, was certainly used for suspending the trinket, while under the plaque an element in gold, also curved into a hollow

<sup>206</sup> Cf. similar decorated plaques among the jewellery from Kamiros, Pinza, *op. cit.*, pl. 29, § 1205, and pl. 30 r.

<sup>207</sup> *Cat. of Jewellery*, pl. xi, 1103.

<sup>208</sup> *Ibid.*, pl. x, 963.

<sup>209</sup> See Rosenberg, *op. cit.*, p. 73, fig. 121; *Cat. of Jewellery*, pl. xiv, 1230-31; *PC.* iii, p. 829, fig. 591.

<sup>210</sup> E. Fontenay, *Les Bijoux anciens et modernes*, Paris, 1887, p. 95 f.; Poulsen, *op. cit.*, p. 145, fig. 169.

<sup>211</sup> Ohnefalsch-Richter, *op. cit.*, pl. xxv, 7.

<sup>212</sup> *AZ.* xlii, 1884, pl. 9, 12; *PC.* iii, p. 827, fig. 588.

<sup>213</sup> *AO.*, pls. lxxxix f, g, k, l; cxxi, 1, 2; clxxx, 29-31.

<sup>214</sup> *AM.* xxviii, 1903, pl. v, 1-3.



annular tube, seems to be fixed to the center of the plaque and to hang from its corners by two thin twisted gold wires. The arrangement of the trinket, as now exhibited, is unique, to my knowledge. It might perhaps be a pendant for a necklace. In fact, we see on some Cypriote statues rows of beads, the lower rows becoming increasingly larger in a manner called *en esclavage*. From the central bead of each, whether round or square, hangs a ring or crescent.<sup>215</sup> But here it is a question of modest pendants, not one like our trinket. The lower part of our gold tube shows granulated decoration with longitudinal rows of s's, separated by ribs. The two ends below simply approached one another, and one of them has a conical form near the tip, which is in the shape of a small granulated pyramid. Such pyramids are common on jewellery of the period in which we are interested, both Phoenician and early Hellenic, in eastern Mediterranean countries as well as in Sardinia. The pyramid may rest on a small rectangular box forming the pendant of an earring, or decorate the end of the wire of the earring itself.<sup>216</sup> It can be seen as the end of a gold earring in a specimen in the Benaki Museum at Athens, almost identical in shape with the one on our trinket, except that one end of the Benaki example is in thin wire to pass through the lobe of the ear.<sup>217</sup> The lack of such a wire in our case suggests rather a hair-ring, for which we also have very similar shapes: e.g. a specimen in Paris, from which a ring and a small bottle hang.<sup>218</sup> On another hair-ring, from an elongated plaque in the shape of a tweezer, hangs a ring supporting in turn a small bottle.<sup>219</sup> The hair-ring adorning a well known ivory statuette from Ephesus is closer to our trinket,<sup>220</sup> though its aspect as a whole is quite different. The general appearance of our trinket, as a matter of fact, is rather incoherent, with its loose annular pendant under the rectangular plaque. Therefore suspicion may arise as to whether the two elements may not have been found separately and been wrongly put together, while there should really be a plaque hanging from the ring, in a more logical and pleasing way, as the elements hanging from a ring in the hair-ring in Paris mentioned would suggest. Only a more accurate technical examination of the object can confirm or refute this supposition. An arrangement of two parts even more similar to that suggested may be seen in earrings, as on a gold earring found at Athens.<sup>221</sup> From a ring, having the same tubular shape, "a sanguisuga," hangs a tall and narrow rectangular plaque. The decoration is similar to that of our trinket: two standing women, in a style similar to that of our figures, both framed and separated from each other by a simple or double wire.<sup>222</sup>

Our rectangular plaque, framed by a wire, shows three standing figures separated by two animal heads. Below each head or protome is a heart-shaped wire, and below it a crescent-shaped one. Both patterns are repeated above the protome.

<sup>215</sup> Fontenay, *op. cit.*, fig. on p. 143.

<sup>216</sup> PC. iii, p. 818 f., figs. 575, 580-81; p. 821, fig. 578; K. Hadaczek, *Der Ohrschmuck der Griechen und Etrusker*, Vienna, 1903, pp. 24 ff.

<sup>217</sup> Berta Segall, *Kat. der Goldschmiede-Arbeiten*, Athens, 1938, pl. 5.

<sup>218</sup> Fontenay, *op. cit.*, fig. on p. 90.

<sup>219</sup> *Ibid.*, fig. on p. 94.

<sup>220</sup> *Excavations at Ephesus*, pl. xxii.

<sup>221</sup> JHS. ii, 1881, fig. on p. 324; Hadaczek, *op. cit.*, p. 24, fig. 45.

<sup>222</sup> Two narrow rectangular gold plaques of early Etruscan art from Caere, now in the British Museum, were perhaps also destined for a similar use. The technique is interesting: there is a single standing female figure fixed in each of them on a smooth gold plaque by a gold wire: see *Cat. of Jewellery*, pl. xvi, 1268; Pinza, *op. cit.*, fig. 294.



The wire was certainly destined to contain stones or enamel. We have already mentioned similar decorative devices in connection with female heads, and they can often be found on other jewellery of the category with which we are dealing.<sup>223</sup> This is, moreover, a favored form of decoration on Greek jewellery of the geometric and early orientalizing periods, examples of which have been found even in Crete,<sup>224</sup> and the forerunners go back in the island to Cretan-Mycenaean art.<sup>225</sup>

Two heads on our plaque seem to belong to quadrupeds, and are inserted each in a horseshoe-shaped device. Heads and horseshoe devices are framed by granulated lines. On the heads two rings indicate eyes, granulated arches the eyebrows and some grains of gold the nostrils. The ends of the horseshoe devices are cut off by transverse granulated bands; in the central portion of the device an arc of separated dots runs between the frames. The pattern is puzzling, and suggests at first a lion's head, or that of a similar animal, seen from above and showing in full view its advanced forelegs. A lion protome in a similar view is known in Crete, e.g., in two bronze lebes handles from the Idaean cave.<sup>226</sup> The same impression is suggested by some decorative patterns, equally strange looking and puzzling, which recur twice on geometric or geometric-orientalizing pottery from Crete: on the shoulder of an ovoid jar in the Candia Museum, known for a long time, and on a fragment of a similar jar from Knossos (figs. 25-26).<sup>227</sup> In both cases the suggestion of feline heads and legs is increased by strokes on the extremities, suggesting leonine paws. On the fragment from Knossos a fish under the animal's mouth may have been suggested by an ornamental device similar to the stone or enamel crescent under the head of our trinket. But it induced the publisher to go so far as tentatively to identify the animal as "an otter, which has brought its prey to the river to devour!"<sup>228</sup>

Closer scrutiny persuades us to discard the interpretation that first presents itself. On the gold ornament the absence of any indication of paws is evident, a detail most accurately rendered in all other categories of decorative elements derived from leonine protomae or legs. Furthermore, there is no separation between the supposed legs and neck or torso of the animal, nor any internal detail to suggest a lion's body or muscles. Consequently a second interpretation, though it may seem far-fetched at first, appears more acceptable. According to this theory, our device is nothing but a schematization, and perhaps a misunderstood one, of the protome of Hathor's cow. The century-long evolution and transformation of this motif from its ancient Egyptian origin has been presented by R. Pettazzoni.<sup>229</sup> From the long series of examples listed, we must indeed remove many a monument on which a female head with spiral locks on the neck cannot be connected with this origin: we have merely a coiffure derived from a genuine Syrian fashion.<sup>230</sup> The fact remains, how-

<sup>223</sup> See e.g. among the ornaments from Rhodes in the British Museum, *Cat. of Jewellery*, pl. xi, no. 1108.

<sup>224</sup> Rosenberg, *op. cit.*, p. 70 f., fig. 117 f.

<sup>225</sup> *Museo Ital.* ii, Atlas, pl. xii, 14.

<sup>226</sup> Pfuhl, *MuZ.* p. 88, fig. 36; M. Hartley, *BSA.* xxxi, 1930-31, p. 84, fig. 21 a.

<sup>227</sup> I know of no representation of an otter in classical art. This animal is very rare in Southern Greece. I saw none in Crete; where there are no large rivers stocked with fish to inspire an artist to represent this animal's fishing accomplishments. Cf. O. Keller, *Die antike Tierwelt* i, Leipzig, 1909, p. 172 f.

<sup>228</sup> *Ausonia* iv, 1909, pp. 181 ff.; *BdA.* n.s. i, 1921-22, pp. 491 ff.

<sup>229</sup> Poulsen, *op. cit.*, p. 44 f.



ever, that the head of Hathor, having a religious and talismanic value, was a very frequent device in the period with which we are dealing, met with in all lands of the eastern Mediterranean, and especially in Cyprus and Rhodes, on statues and reliefs



FIG. 25.—MUSEUM OF CANDIA: GEOMETRIC JAR  
(Pfuhl, *MuZ.*, fig. 36)



FIG. 26.—FRAGMENT OF JAR FROM KNOSSOS  
(BSA. xxxi, 1930-31, p. 84, fig. 21 a)



FIG. 27.—HATHOR HEAD ON A GOLD PLAQUE FROM MEROË IN ETHIOPIA  
(M. Rosenberg, *Gesch. der Goldschmiedekunst* iii, *Zellenschmelz*, p. 24, fig. 26)



FIG. 28.—FRAGMENT OF LAMINATED BRONZE FROM THE IDAEAN CAVE  
(Kunze, *Kretische Bronzereliefs*, pl. 31, no. 30)

as well as on bronze, faïence and terracotta vases and on gold pendants. By this time a graceful female countenance is generally substituted for the original animal head, with cow's ears; sometimes, however, the original cow's head, or at least a trace of the original form undoubtedly still persists. Limiting ourselves to the artistic category with which we are now dealing, we may cite a gold plaque decorated in relief (fig. 27), of an even later date than that in which we are interested, belonging



to an important find from Meroë in Ethiopia.<sup>231</sup> Here the head shows the broad animal shape with big eyes and with two long diverging cow's ears. The hair over the head is transformed, however, to resemble a leonine mane. Two falling curls end in spirals that contained enamel, from which two uraei rise again on the sides of the temples. A convincing confirmation that the coiffure of a protome of Hathor may have assumed an aspect similar to that of our trinket in Cretan art of our period, is provided by the coiffure of a female head on a bronze fragment from the Idaean cave (fig 28).<sup>232</sup> Here again the hair has the aspect of half a ring, presenting even the smooth ends cut off by incised strokes noted on our trinket. On the pithos from Crete, fig. 25, one of our devices seems clearly to show the cow's ears. On the fragment, fig. 26, the hooked appendices might either be ears or a degeneration of uraei. Here the ends of the lateral elements are prolonged and have pointed tips. The suggestion of legs in these lateral elements might depend on the presence in some representations of Hathoric protomae, of arms hanging on both sides of the head: e.g. on the Barberini bowl from Praeneste, on which the arms support the carriage of the Phoenician priest for whose protection the protome was meant.<sup>233</sup> But perhaps they are nothing but a geometric transformation of the rendering of hair, imitating those specimens with locks falling in parallel lines on the sides of the head, rather than those with spiral locks, as e.g. on a faience vase from Kamiros.<sup>234</sup> The strokes suggesting paws may be merely the ends of locks, or a hint at a hair-comb. The same device can, in fact, be seen elsewhere on Cretan geometric pottery, precisely where a similar suggestion seems to be intended—an attempted anthropomorphization of geometric elements as e.g. on a huge amphora from Kavousi.<sup>235</sup> For those who accept the derivation of the Gorgon mask from the head of Hathor, the Cretan monuments examined would offer, in our interpretation, an interesting—though schematized and transitory—link of the geometric age in the long chain of monuments of the century-long evolution of the motif.

The three standing figures on our trinket are all in front view. They wear a long tunic, covering the feet, closely bound at the waist by a belt, with an overfold or a kind of shawl so arranged on the sides as to leave a great part of the arms uncovered. The gown is decorated with a vertical *παρυφή*, with a row of dots between two granulated lines. A similar horizontal band forms the lower rim of the tunic. The women wear a low cylindrical polos on the head, with the same device found on the embroidered bands of the tunic; a necklace of round beads adorns the neck. The faces, narrowing toward the chin, are enlivened by large, empty elliptical eyes. Locks of hair, also granulated, seem to end in spirals turned inward. The female countenance looks earlier and more closely bound to oriental models than similar

<sup>231</sup> Kg. Museen zu Berlin, *Mitt. aus der ägyptischen Sammlung* i, H. Schäfer, *Ägyptische Goldschmiedearbeiten*, Berlin, 1910, p. 154, no. 245, pls. 30 and 32; Rosenberg, *op. cit.* iii, *Zellenschmelz*, p. 24, fig. 26. The replicas of this amulet are shared between the Berlin and Munich museums. Cf. furthermore a similar amulet, Pettazzoni, *Ausonia*, *loc. cit.*, p. 187, fig. 5.

<sup>232</sup> Kunze, *Kretische Bronzereliefs*, no. 30, pl. 31.

<sup>233</sup> Pettazzoni, *Ausonia*, *loc. cit.*, p. 193, fig. 12; C. Densmore Curtis, *MAAR*, iii, 1919, pl. 20; P. Ducati, *Storia dell'arte etrusca*, fig. 98.

<sup>234</sup> Pettazzoni, *op. cit.*, p. 214, fig. 49; *BdA.*, *loc. cit.*, p. 505, fig. 30.

<sup>235</sup> *Arkades*, p. 591, fig. 640, cf. p. 592.



images on Rhodian jewellery and those from eastern Greece to which we have referred. Both the garments and the shape of face, with big staring eyes, recall especially ivories from Ephesus and Nimrud: e.g. the statuette from Ephesus showing an earring of a shape not dissimilar to the piece of jewellery under discussion.<sup>236</sup> The rigid position of the arms along the thighs, with hands close to the sides, is identical, and can be seen as well in a bronze statuette of a goddess from Ephesus.<sup>237</sup> The embroidered *paryphe* can be noticed on a group of Hittite ivories in the Louvre,<sup>238</sup> of which one even has the same pattern of small discs found on our figurine. A low cylindrical polos like those on our plaque has been pointed out before, especially on ivory heads from Nimrud, on which the polos sometimes has a very similar decoration of tongues or drops.<sup>239</sup> These heads wear necklaces with one or more rows of beads. A female statuette in ivory from Ephesus, wearing a turban-like polos, with several beaded bands, has a necklace with a single row of large beads.<sup>240</sup> It is not quite certain that the figurine in solid gold from Ephesus, in a similar attitude, wears a polos,<sup>241</sup> but a low cylindrical polos is worn by nude female figurines in relief on gold plaques from a tomb of the Late Cypriote geometric period (Geometric III) from Lapithos.<sup>242</sup> A woman, similar to our figures in garments and attitude, on an ivory plaque from Sparta, wears a polos decorated with a row of small circles, but under the polos there is the coiffure with "Etagenperücke."<sup>243</sup> This coiffure, without the polos, is worn by a female figure standing in the center of a magnificent semicircular plaque from the treasure of Aïdin-Tralles, already mentioned;<sup>244</sup> otherwise the garments, aspect and position of the arms of this figure are entirely similar to our images, except that the *paryphe* is more elaborate. Another trinket from the same find<sup>245</sup> has two female heads flanking a rosette, in relief on a rectangular plaque, above which are three small discs. The coiffure of the heads is similar to that of our figurines. The locks of our figures seem to end at chin height in a small spiral turned inward. Longer locks also end in diminutive, hardly distinguishable spirals turned inward in the relief heads of some gold plaques from Late Geometric tombs at Lapithos.<sup>246</sup> Spirals turned toward the neck, slightly under the chin, according to a peculiar Syrian coiffure, can be seen on some carved heads on bone and ivory seals from Sparta.<sup>247</sup>

When I published the gold plaque from the Candia Museum, to which the two new fragments can now be added (fig. 29), I interpreted the representation as the image of a female divinity between two worshippers or attendants, according to a scheme already well known in Minoan art. Picard agrees with Chapoutier that in this monument we have the earliest representation in the classical world of the "Dioscuri in the service of a goddess." Chapoutier believes, however, that precedents for this scene must be sought in the oriental world, because similar groups in Minoan art would always consist of three female figures. On a gold ring from the

<sup>236</sup> *Excavations at Ephesus*, pls. XXI, 6, XXII. For the shape of the head, as well as for the cut of the big, marked eyes, cf. the heads of the famous "women at the window" from Nimrud, *ibid.*, pl. XXVIII, 5.

<sup>237</sup> *Ibid.*, pl. XIV.

<sup>238</sup> Poulsen, *op. cit.*, p. 56, figs. 53, 54, 57.

<sup>239</sup> *Excavations at Ephesus*, pl. XXIX, especially nos. 3, 8.

<sup>240</sup> *Ibid.*, pl. XXIV, 1.

<sup>241</sup> *Ibid.*, pl. III, 11.

<sup>242</sup> *SCE*, i, pl. LI, 1, 13-15.

<sup>243</sup> *AO.*, pl. XCVI, 2 (about 700 B.C.).

<sup>244</sup> *PC*, v, p. 295, fig. 203.

<sup>245</sup> *Ibid.*, p. 297, fig. 205.

<sup>246</sup> *SCE*, i, pl. XLIV, 1, 3, 41.

<sup>247</sup> Poulsen, *op. cit.*, p. 45, fig. 29; *AO*, pls. CXXI, 3; CXLV, 2.



tomb of Isopata<sup>248</sup> the goddess is flanked by worshipping women, in a level lower than herself, but two on one side and one alone on the other. A group of a woman in large scale between two smaller ones is more strictly symmetrical. On some Cretan seals and seal impressions all three are in the same attitude with their hands on their thighs.<sup>249</sup> But on another signet type from H. Triada the female figure in the center is flanked by two figures wearing an animal-skin apron, one of them holding a long staff. The sacral skin may be worn by both sexes; in our case, however, the lateral figures have rather a masculine aspect.<sup>250</sup> An alternation in the sex of the attendants, as well as occasional uncertainty about their sex, is also found in

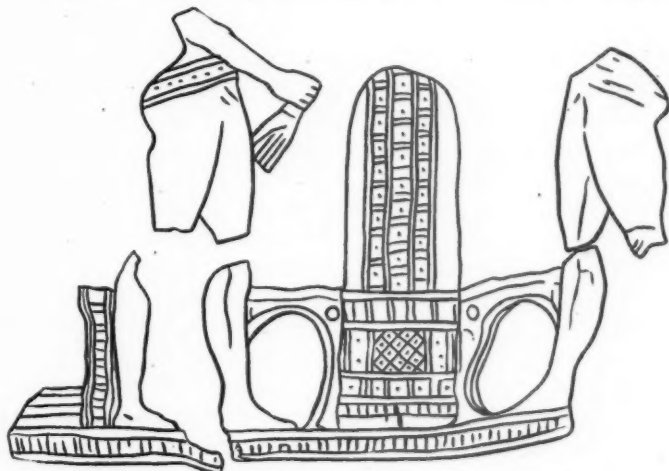


FIG. 29. — GOLD PLAQUE FROM THE IDAEAN CAVE IN THE CANDIA MUSEUM  
WITH FRAGMENTS IN THE ATHENS MUSEUM RESTORED ON IT  
(Original Drawing)

representations of this scene in the early Hellenic period. Uncertainty about the sex of the acolytes exists in a relief on the neck of a well known and much discussed Boeotian amphora.<sup>251</sup> Discarding fanciful interpretations, such as that of the parturition of the goddess of fecundity, we find here again the Cretan Magna Mater of nature, wearing a polos, characterized by her two subdued animals in heraldic position, as well as by two small attendants, either women or men wearing long

<sup>248</sup> Bossert, *op. cit.*, fig. 400 g; Persson, *Rel. of Greece in Prehistoric Times*, p. 173, fig. 8 a-b.

<sup>249</sup> See "Cretule di H. Triada," p. 141, no. 140, fig. 156 and pl. xiv.

<sup>250</sup> *Ibid.*, p. 138, no. 135, fig. 151, and pl. xiv; Chapoutier, *op. cit.*, p. 189, fig. 20. See the difference between the men in this costume and the women, the latter of whom practically always have a clear indication of long and waving curls on the shoulders, on my table of Minoan fashions, "Cretule di H. Triada," p. 155, fig. 164; *Enciclopedia Italiana*, s.v. *Cretese — Micenea civiltà*, p. 865, fig. 2. The table is reproduced by Bossert, *op. cit.*, p. 39, fig. 15. The comparison adduced by Chapoutier, *op. cit.*, p. 190, does not solve the question in any way: it is the signet from H. Triada, "Cretule di H. Triada," p. 131, no. 124, fig. 140 and pl. ix, showing a quite different scene, namely a procession of two women each carrying a double axe, one wearing the usual bell-shaped gown, the other a sacral skin. The second woman's sex is made clear by the long, undulating locks on her shoulders.

<sup>251</sup> Wolters, 'Eφ., 1892, pp. 213 ff., pls. viii-ix; De Ridder, *BCH.* xxii, 1898, p. 440, fig. 1; Courby, *op. cit.*, p. 70 and fig. 16 E; Chapoutier, *op. cit.*, p. 226.



sacral garments. The strange attitude of the figures, seemingly supporting the huge female figure dressed in a broad bell-shaped gown, as well as the stiff and immobile attitude of the central figure, suggest for the latter the interpretation of a divine "eidolon," with arms uplifted according to the gesture of some idols in the Late Mycenaean age. We have mentioned the occurrence of anthropomorphization of idols in Cretan-Mycenaean art, in connection with the painted plaster slab from Mycenae, where the idol, to which female characteristics seem to be attributed, is flanked by two worshipping women.

In connection with the early religion of Crete, two hierodules attending the divinity cannot fail to recall the name of the Kuretes. The Kuretes, or Kouroi, or Corybantes, must not be considered simply the saviors and educators of the child Zeus, but also the protectors and servants of his mother Rhea. In fact, they continue to be associated with the divine hypostases of the Cretan Great Mother, Artemis and Dictynna, on sites where these divinities continued the cult of the preceding Minoan religion: at Miletus, at Didyma, in the mysteries of Solmissos in Asia Minor. Even an inscription from Delphi is dedicated to the "Kuretes of Dictynna." Their association must have extended to figures of the heroines, Ariadne and Helen, into which the image of the Minoan Great Mother was later transformed by Hellenic mythology. The greater frequency in Minoan religion of female attendants—which Evans called by analogy Διόσκουραι<sup>252</sup>—is perhaps responsible for a Greek tradition which seems to preserve the memory of the female forerunners of the Kuretes, as well as for a popular pseudo-etymology deriving their names from the fact that they "combed" their hair in effeminate fashion (κουρά, κουρεύω), matched by the wearing of long female robes. In a lead group from the sanctuary of Artemis Orthia the female attendants, in profile and wearing a polos, flank the goddess in full view, in a scheme identical with that of our plaque. The goddess also wears a polos, and is again represented in both her aspects: πόντια θηρῶν and πόντια ἀνδρῶν τε θεῶν τε, grasping the tails of two lions at her feet. On some magnificent Etruscan gold bracelets<sup>253</sup> we see the divinity, either female or male, flanked by two rampant lions behind which are two male hierodules, sometimes replacing the divinity in the act of grasping the lions' tails. The Kuretes may also appear as acolytes of Zeus, who is now no longer an infant, but represented as the supreme ruler of nature. Such is the representation on the famous bronze tympanum from the Idaean cave.<sup>254</sup> Under the direct influence of oriental art, to which the Idaean bronzes were subjected, Zeus' attendants have taken on the Assyrian forms of winged and bearded figures, although they have been given entirely new functions: that is, the use of tympana, attributed to them by Hellenic legend.<sup>255</sup> On an ivory plaque from the sanctuary of Artemis Orthia it is the turn of a male figure to be flanked by two women.<sup>256</sup> On the arm band of a bronze shield from Olympia,<sup>257</sup>

<sup>252</sup> *JHS*. xlv, 1925, pp. 11 ff. (as a matter of fact, badly named Διόσκουραι by Evans, and by others following him).

<sup>253</sup> Pinza, *op. cit.*, p. 190 f., pls. xxv-xxvi; *Cat. of Jewellery*, pl. xviii.

<sup>254</sup> Kunze, *KB.*, no. 74, pl. 49.

<sup>255</sup> The type of orientalizing acolyte on this Cretan bronze no longer appears isolated. On a fragment of a bronze tripod base found during recent excavations at Olympia, are remains of two similar winged figures opposed on either side of a schematized tree: "I Bericht über die Ausgrabungen in Olympia," *JdI*. lii, 1937, p. 71, fig. 32 and pl. 20, 1.

<sup>256</sup> *Artemis Orthia*, pl. xcv.

<sup>257</sup> *JdI*. liii, 1938, p. 29.



on the other hand, we find on the lower panel—toward the beginning of the sixth century—a goddess in full view, with long locks falling over her shoulders, flanked by two male acolytes in profile. The goddess rests her hands on her thighs, in a gesture recalling that of the ancient goddesses on Minoan seals. More interesting for us is the fact that the attendants' gestures bring us back to our gold plaque: while one hand of each is lifted over the goddess' head, the other grasps one of her wrists.<sup>258</sup>

The gesture of grasping a person by the wrist is the most important detail provided by the new fragments. It is one seen most frequently in early Hellenic art: on the jug of Theseus and Ariadne from Arkades; the cuirass from Olympia; the scenes of departure on a boat on an Attic geometric amphora, mentioned earlier, as well as on an ivory plaque from Sparta, and other scenes on this class of Spartan ivories, such as a relief under a plastic figure of a crouching lion. The ivory plaque shows a male figure between two women, and another has a scene of a woman facing a man.<sup>259</sup> These last representations might suggest that we have not religious, but merely genre scenes. On the ivory relief with two figures, the woman's hand, grasped at the wrist by the man, holds a crown. Elsewhere two figures in similar attitudes hold two crowns between them.<sup>260</sup> It is the same action found on the mitra from Rethymno; on a fragment of a relief pithos from Lyttos; on a polychrome plate from Thera; and so on.<sup>261</sup> A religious meaning is probably to be attributed to all these representations.

Chapoutier, after denying the derivation from Minoan art of the scheme of the "Dioscuri in the service of a goddess," suggests an origin in the East. In support of this he can, however, produce only a late mirror-stand from a tumulus of the Troad, already marked by the classical iconography of the group of the twin equestrian Dioscuri flanking Helen.<sup>262</sup> As a matter of fact, precedents for an antithetical group of two figures flanking a central one, in which both the sex of the central and that

<sup>258</sup> Sculptured limestone from Magoula near Sparta, belonging to the sixth century. shows a nude, kneeling woman, flanked and supported by two ithyphallic male figures: see M. N. Tod and A. J. B. Wace, *A Catalogue of the Sparta Museum*, Oxford, 1906, p. 171 f., figs. 50-51; Picard, *loc. cit.*, p. 66, pl. II. The subject of this representation is, however, disputable: cf. Chapoutier, *op. cit.*, p. 226. We refrain from following the series of monuments on which a group of the two "Dioscuri in the service of Helen," or of a goddess, and later the "Mater Larum," are transformed, beginning with the archaic relief from Sparta, Picard, *loc. cit.*, pl. I, 3, according to a scheme of increasingly Hellenic spirit. On the Sparta relief the female figure is still in front view between two male figures in profile, in a composition not unlike that on the gold plaque from the Idaean cave. We notice in the goddess' hands two hanging objects, which may be simple fillets, as well as crowns with pendent balls, which we shall discuss later.

<sup>259</sup> *EHPC.*, pl. XII; Pfuhl, *op. cit.*, figs. 15 and 135; *AO.*, pls. CIX-CX, CL, XCV, XCIV.

<sup>260</sup> *AO.*, pl. XCVII, 2.

<sup>261</sup> *AM.* xxxi, 1906, pl. XXIII = "Bronzi di Axòs," pp. 96 ff., figs. 35-36; *EHPC.*, pl. XXXI, 4; Pfuhl, *op. cit.*, fig. 103. Perhaps an ornamental rosette suspended in space is substituted for the crown on one of the panels representing two women facing each other on the gold band from Rhodes in the British Museum, *Cat. of Jewellery*, p. 95, fig. 20.

<sup>262</sup> *Op. cit.*, pp. 214 ff., fig. 29. Nor has the iconography of our group any relationship to two oriental monuments cited by Picard, *loc. cit.*, p. 71, note 3. One is a painting on an Egyptian wooden stele, representing the goddess Nut pouring water from two vases before two figures of dead persons sitting on either side. This is a work belonging to the XXV dynasty, and not earlier than the end of the eighth century B.C. (see *B.M.A.* 1922, part II, Dec., p. 37, fig. 28). The second example is a Hittite cylinder from Carchemish (*AM.* I, 1925, p. 68, fig. 7), on which an image of a nude goddess is supported on a trophy by two small kneeling genii.



of the lateral figures may alternate, can be traced in great numbers in Oriental art. For Egypt, we may mention a relief of the twentieth or nineteenth dynasty, on which a goddess, called Kadesh on the Orontes, appears naked, standing in front view on a lion flanked by two male divinities.<sup>263</sup> In Mesopotamian art an antithetical grouping of figures goes back to very early times, e.g. on a seal of the First Babylonian dynasty in the Louvre, on which a god is flanked by two beardless figures wearing long tunics.<sup>264</sup> But, after these rather loose groupings of three figures, a more strictly antithetical scheme can be seen when one considers later Kassite, Assyrian and Syro-Hittite art. The strictly symmetrical scheme spreads increasingly with later Assyrian art, becoming the "raison d'être" of the composition, particularly in the representation of two paredroi flanking the Tree of Life, which replaces the divinity.<sup>265</sup> The name of the divinity can be established as Assur, thanks to his symbol, the winged disc, which often occurs above the tree. The ancient Egyptian symbol of Ra is schematized on these seals into the Assyrian formula, toward the end of the ninth and more definitely in the eighth century, resembling the form of a headless bird, with short wings and a tail.<sup>266</sup> The substitution for the divinity of its symbol, the Tree of Life, had also passed long before from the Orient to Cretan-Mycenaean art: it suffices to recall the gold ring from Mycenae, on which two women are in a worshipping attitude characteristic of the women on the Isopata ring, but this time flanking the tree rising above the altar; also a similar representation on a seal impression from H. Triada, on which the women's worshipping gesture is that of two uplifted arms, seen earlier.<sup>267</sup> The motif passed unchanged to early Hellenic art: the subject of the mitra from Rethymno should, in fact, be considered as such. As far as this monument is concerned, we may adduce a close Assyrian precedent for the peculiar shape of the Tree of Life on a seal of the early eighth century on which Ishtar, holding a crown, approaches a similarly stylized tree: Assur's effigy appears above it (fig. 30).<sup>268</sup> In Assyrian representations the sacred tree is flanked by winged creatures, often with birds' heads, as well as by human beings, or by both winged genii and men standing behind them, sometimes interpreted as images of kings. On an Assyrian seal, Adad, replacing the sacred tree, stands on a bull, raising a dotted crown in his right hand, and flanked

<sup>263</sup> Ohnefalsch-Richter, *op. cit.*, p. 75, fig. 100 and pl. 122, 1; Pettazzoni, *Ausonia, loc. cit.*, p. 190, fig. 10.

<sup>264</sup> Delaporte, Mus. du Louvre, *Cat. des cylindres orientaux* i, pl. 53, 18 (D. 122).

<sup>265</sup> Frankfort, *op. cit.*, p. 204 f., pls. xxxii-xxxiii and xxxv; cf. also Menant, *op. cit.* ii, pp. 61 ff.

<sup>266</sup> On this symbol, Ward, *op. cit.*, p. 395 f.; Frankfort, *op. cit.*, pp. 207 ff.

<sup>267</sup> Bossert, *op. cit.*, fig. 399 g; Persson, *Rel. of Greece in Prehistoric Times*, p. 176, fig. 16; "Cretule di H. Triada," p. 139, no. 137; fig. 153 and pl. ix.

<sup>268</sup> Frankfort, *op. cit.*, pl. xxxiii c. When discussing the representation of the mitra from Rethymno, I have shown elsewhere that above the Tree of Life there is a bird. This means that Hellenic art transformed Assur's symbol, the resemblance of which to a bird's form we have pointed out, into an actual bird, that is, the element for centuries representing the epiphany of the god, in Minoan art as well as in early Greek art. But it is highly probable that the stylization of Assur's symbol with a tail determined the peculiar stylization of the fan-like tail on the bird on the mitra from Rethymno, as well as on isolated birds of early Greek art. This stylization is to be seen on the Protocorinthian aryballos reproduced in fig. 21, as well as on numerous ivory seals from Sparta: *AO.*, pls. cxliv, cxlv, xlviii, 1. Another type of Tree of Life in the Assyrian repertory, on a seal in Boston (Frankfort, *op. cit.*, pl. xxxii b), finds a direct imitation in Cretan geometric-orientalizing art. See an imitation on painted pottery, *Arkades*, p. 515, fig. 599 C, 5th row; and *BSA.* xxix, 1927-28, fig. 34, no. 35.



by two winged genii;<sup>269</sup> or on another seal there may be the god, also holding a crown, standing on a crouching lion, and flanked by two human figures.<sup>270</sup>

This attitude of a divinity raising a crown in the hand calls for discussion. The same gesture appears in other representations, such as that of Ishtar raising a crown



FIG. 30.—SEAL OF MANNU-KIMAMATU-ASSUR (ABOUT 790 B.C.) IN BERLIN

(Frankfort, *Cylinder Seals*, pl. xxxiii c)



FIG. 31.—DETAIL OF BRONZE BOWL FROM NIMRUD

(Layard, *Monuments of Nineveh*, pl. 65, central medallion)

over the Tree of Life in fig. 30. The divinity appears in the same attitude on other seals, and may also be seen lifting a crown when the tree is lacking, or holding it in the hand when sitting on a throne.<sup>271</sup> A crown, as an offering to a divinity or victorious hero, occurs early in Mesopotamian art. On a Chaldaean cylinder in the

<sup>269</sup> A. H. Layard, *Monuments of Nineveh* ii, London, 1853, pl. 69, 44; Frankfort, *op. cit.*, pl. xxxii g.

<sup>270</sup> Layard, *op. cit.*, pl. 69, 40.

<sup>271</sup> Frankfort, *op. cit.*, pl. xxxiii f, k, j, g. See also the Achemenian seal on which a figure carries a crown toward the Tree of Life, Menant, *op. cit.* ii, p. 172, fig. 150.



Louvre,<sup>272</sup> between two groups of fighting divinities, a woman, wearing kaunakes, holds a crown to present to the victor. But as far as the antithetical groups with the Tree of Life are concerned, the meaning of the crown is perhaps determined by the ceremony itself. We know, in fact, that in Assyria during the celebration of the New Year festival, metal bands, called "yokes," adorned with fillets, were bound to a bare tree branch, probably of cedar, in a ritual meant to propitiate the renewal of nature in the new year. The symbol of the Sacred Tree in the representations mentioned corresponds in all probability to this bedecked Maypole, and it was the object of different ceremonies on other occasions as well, not only in Assyria, but in Syria and Palestine. This time the symbolism as well probably goes back as far as the earliest Chaldaean civilization. On the well known stele of Ur-Nammu,<sup>273</sup> dated 2294 B.C., we see the king stretching out a similar crown toward a Tree of Life. The text, praising the king, particularly for his work in fertilizing the country, explains the meaning of this attitude. This is the reason why I have suggested a religious meaning for the similar action of the youths lifting a crown above the sacred tree on the mitra from Rethymno, as well as for similar scenes in early Hellenic art, even where the sacred tree is lacking, but where a hint at similar ritual celebrations may be assumed. Crowns are common among the finds of the sanctuary of Artemis Orthia, held both by the goddess and by her attendants. They occur in the hands of her maidens in a lead group where they flank the Mistress of the Lions, and on a large number of single images of the goddess, who sometimes holds crowns in both hands.<sup>274</sup> Sometimes the crown is dotted, as on representations in the Orient. Isolated crowns also appear in great numbers as votive offerings, showing their primary importance as an object of the cult in the sanctuary; they often show pendent balls.<sup>275</sup>

On some of the Etruscan gold bracelets mentioned, the two attendants of the divinity each raise a hand over the head. On the arm-band of a bronze shield from Olympia they grasp the divinity by the wrist with one hand while they raise the other hand over the head, almost suggesting that they are crowning it. The latter composition leads us to consider one more monument of Oriental art, which so far has remained almost forgotten, perhaps because its central representation is very obscure and has generally been misunderstood. This monument is especially important for us, since it is one of those Phoenician bronze bowls which offered direct models for the production of laminated bronzes in the orientalizing art of Crete, in this case, a bowl from Nimrud.<sup>276</sup> The scene in the central disc (fig. 31) was interpreted by Poulsen as the capture of a prisoner by two soldiers, but there is no hint of violence in the scene. In the center a male figure in front view, large in size,

<sup>272</sup> Delaporte, *Cat. ii*, pl. 71, 10 (A. 142).

<sup>273</sup> C. L. Woolley, *Ur of the Chaldees*, London, 1929, pl. Xb; *idem*, *The Development of Sumerian Art*, New York, 1935, pl. 63, 1. <sup>274</sup> *AO.*, p. 260 f., figs. 120-21, pls. CLXXXI f., CLXXXIX f., etc.

<sup>275</sup> *Ibid.*, pls. CLXXX, 1; CLXXXVI, 30; CXCIX, 24-26, etc.

<sup>276</sup> Layard, *op. cit.*, pl. 65; cf. *idem*, *Discoveries of Nineveh and Babylon*, New York, 1853, p. 183; Poulsen, *op. cit.*, p. 8. The closest resemblance to the representation of the Phoenician bowl is found in the relief from Tell Halaf in the Walters Art Gallery in Baltimore. Its interpretation by von Oppenheim (*Tell Halaf*, p. 156, pl. 36 a) as the slaughter of the demon Huwawa by Gilgamesh and his friend Engidu is not convincing.



wears a short cylindrical tunic, from the edge of which the naked legs seem to emerge, diverging and, curiously enough, with toes turned inward. The figure is bearded, and its hair shows a carefully rendered coiffure, with a middle parting and two long spiral locks on the shoulders. The face and coiffure strongly recall the head of Zeus on the tympanum from the Idaean cave. The arms are crossed, as if inert, in front of the body, while two smaller figures, one at each side, grasp the wrists of the central figure and lift their other hands over his head. We believe that the publisher of the bowl was correct when he suggested as an interpretation of the scene two acolytes flanking a god. They seem to raise something over the head of the god, or of his idol: something quite visibly distinct from the hair, and suggesting indeed the impression of a wreath, one perhaps provided with pendent balls. The hierodules wear the same garment, an upgirt tunic and a loin cloth, and a coiffure often seen in this group of Phoenician bronzes.<sup>277</sup> This coiffure cannot fail to recall a description of the Kuretes, "dressing their hair like dainty damsels," in a fragment of Aeschylus (in Athenaeus xii, 37).

In our analysis of the gold plaque from the Idaean cave borrowings from the Orient appeared to be numerous, both in the general composition and in single elements, the aspect of the figures, details of their garments and their coiffures, attitudes, ritual attributes and symbols. There is no need to insist on the fact that all these foreign elements in the early Hellenic art of Crete have been subjected to an immediate assimilation and metamorphosis according to the artistic schemes, conceptions and characteristics of the Greek people, in the same way as centuries before another wave of oriental influence had been assimilated and transformed by Minoan art. Before evaluating the contribution offered by the Orient in this new importation of schemes of composition and of single artistic elements, we must, however, bear in mind what we were taught by recent excavations at Ras Shamra and other Syrian and Phoenician sites at the end of the Bronze Age. We must not forget the rôle, each day appearing more important, which in this period was played by the commerce and colonization of the Aegean peoples in artistic creation, and generally in the history of art itself, on the Asiatic shores of the Mediterranean. Only when we can trace the whole picture of the history of art in the eastern Mediterranean countries from the decline of Mycenaean to archaic Greek art, will it be possible to say exactly how much the latter owes to the old civilizations and arts of the Orient, and how much—either directly, or through a reflux from Syrian shores—to the spiritual and artistic inheritance from the Minoan people.

INSTITUTE FOR ADVANCED STUDY

DORO LEVI

<sup>277</sup> See e.g. the bowl on the preceding plate of Layard, *op. cit.*, pl. 64.



## AMYKOS AND THE DIOSKOUROI\*

EARLY in 1885, two bronze statues, cast in the same over life-size scale, were found in Rome in precisely the same place and at approximately the same time.<sup>1</sup> Their extraordinary quality and almost perfect preservation have caused them to be widely discussed and, on a number of occasions, to be illustrated on opposite pages. Their technical similarities are so marked as to have been repeatedly pointed out and, at one time, led to the suggestion that they might be the work of the same artist.<sup>2</sup> In spite of these exceptional circumstances, the two statues were considered so unlike each other in type that at no time in the course of the long effort to explain them has it been suggested that they might belong together.

Yet, the first of these statues, the so-called "Hellenistic Ruler"<sup>3</sup> (figs. 1-2) is as unexplained today as on the day of its discovery. A succession of archaeologists has seen in its face the features of a Macedonian or Syrian prince, of Philip V or Perseus, of Alexander Balas or Alexander Theos.<sup>4</sup> The most widely repeated identification,

\* I am greatly indebted to my husband, Karl Lehmann, for assistance in the preparation of this article. I should also like to acknowledge the benefit of discussing the interpretation presented here with Professor Rhys Carpenter whose remarkable discovery of the "Boxer's" signature and various articles on both the "Boxer" and the "Ruler" have added so greatly to our knowledge of these statues. It was, therefore, with particular pleasure that I learned that he, too, had hit upon a similar connection and interpretation of these two statues. In the course of following up my explanation of the "Boxer" and the "Ruler," I was glad to discover that Helbig, Lanciani, Rossbach, Petersen, Wace, Dickins, Klein, Paribeni and Lawrence had all made observations in regard to these statues which, in sum, pointed toward the very solution I had arrived at by a quite different approach. I take this as a welcome confirmation of the theory advanced here.

<sup>1</sup> NS. x, 1885, pp. 42 and 223. A fascinating account of the discovery and excavation of these statues was published by Rodolfo Lanciani, *Ancient Rome in the Light of Recent Excavations*, Boston and New York, 1892, pp. 297 ff. In clearing ground for the erection of the Teatro Drammatico on the Via Nazionale, workmen found the so-called "Hellenistic Ruler" buried between foundation walls of part of the Baths of Constantine. Soon afterward, the "Boxer" appeared within a short distance, seated on a Doric capital, and giving clear evidence of having been carefully hidden away, presumably in the course of some late antique emergency. The same circumstances apparently apply to the "Ruler" who, unfortunately, was excavated before the authorities arrived on the scene. P. 305 reproduces a photograph of the "Boxer" in situ as does S. Reinach, "Courrier de l'art antique," *GBA.* xxxiii, 1886, 1, p. 429.

<sup>2</sup> Rhys Carpenter, "The 'Hellenistic Ruler' of the Terme Museum," *AJA.* xxxi, 1927, p. 164. More recently, the author has withdrawn this suggestion, "Observations on Familiar Statuary in Rome," *MAAR.* xviii, 1941, pp. 81-4, 92-3. See also note 47.

<sup>3</sup> Museo nazionale romano, No. 544 (1049). Ht. to crown: 2.08 m; to top of raised l. arm: 2.37 m. Eyeballs originally inserted. Restorations: forepart of l. index and of r. middle finger, fragment on l. thigh above knee, base and staff. W. Helbig, *Führer durch die öffentlichen sammlungen klassischer Altertümer in Rom*<sup>3</sup>, Leipzig, 1912-13, ii, 133-5, No. 1347; R. Paribeni, *Le Terme di Diocleziano e il museo nazionale romano*, Rome, 1932, p. 203; P. Arndt, F. Bruckmann, *Griechische und römische Porträts*, Munich, 1891, Nos. 358-60; *BrBr.* No. 246 (following what was probably a typographical error in Helbig, it is widely repeated that the statues were found in 1884, instead of 1885).

<sup>4</sup> Philip V: Helbig, *Führer*,<sup>1</sup> 1891, ii, 198-9, No. 958 and *AD.* i, 1891, p. 2, pl. v; Perseus: Studniczka, quoted and rejected by G. F. Hill, "A Portrait of Perseus of Macedon," *Numismatic Chronicle*, ser. 3, xvi, 1896, p. 38; Alexander Balas: Rossbach, *AA.* vi, 1891, p. 69, accepted by A. Furtwängler, *Masterpieces of Greek Sculpture*, ed. Sellers, New York, 1895, p. 364, note 2; Alexander Theos: W. Klein, *Geschichte der griechischen Kunst*, Leipzig, 1907, iii, pp. 43 ff.





FIG. 1.—ROME, MUSEO NAZIONALE. BRONZE STATUE, THE SO-CALLED HELLENISTIC RULER



FIG. 2.—ROME, MUSEO NAZIONALE. BRONZE STATUE, THE SO-CALLED HELLENISTIC RULER



FIG. 6.—LONDON, BRITISH MUSEUM. ENGRAVED RING. HELEN BETWEEN THE DIOSKOUROI

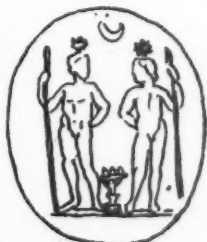


FIG. 7.—BERLIN, ANTIQUARIUM. ENGRAVED GEM. THE DIOSKOUROI



that of Demetrios I of Syria,<sup>5</sup> grew out of the sound observation that the statue lacks the royal diadem, in addition to showing the first downy beard of a young man who has neither shaved nor achieved a full beard, two details which would fit Demetrios' age and appearance during his stay in Rome as a hostage. The soundness of this specific observation by no means alters the essential fact that there is no possible reason to assume that a hostage would be in a position to dedicate a statue of himself in heroic or divinized guise as a public monument in the city of his detention. The numismatic comparisons on which all of these identifications are based are so unsatisfactory as to have convinced few save their respective authors and, given the crucial fact that this enigmatic young man wears no diadem, have driven others to interpret him as "a prince in the heroic guise of an athlete,"<sup>6</sup> as a general,<sup>7</sup> as the portrait of "a nude athlete or at least a man of the athletic type,"<sup>8</sup> as a hero resting on a lance,<sup>9</sup> as a Roman adaptation of an earlier athletic statue<sup>10</sup> or, most recently, as Lucullus.<sup>11</sup> The stylistic attributions accompanying this remarkable array of interpretations have, naturally, been as various, ranging from Lysippan to Neo-Attic or Neo-Pheidian and including a bewildering and conflicting variety of opinions, general and specific.<sup>12</sup>

The "Boxer" (figs. 3-5) has fared slightly better, thanks to the unmistakable evidence of his occupation.<sup>13</sup> At this point, however, agreement stops, and whether

<sup>5</sup> R. Delbrück, *Antike Porträts*, Bonn, pp. xliii-iv, fig. 16, pl. 30, followed by W. Schick "Zwei römische Kolossalstatuen und die hellenistische Kunst Syriens," *NJ*. xvii (33), 1914, pp. 18-56; A. W. Lawrence, *Later Greek Sculpture*, London, 1927, p. 29, pl. LI; E. Pfuhl, "Ikonographische Beiträge zur Stilgeschichte der hellenistischen Kunst," *JdI*. xlv, 1930, pp. 11 ff.; V. Müller, "A Chronology of Greek Sculpture 400 B.C. to 40 B.C.," *The Art Bulletin* xx, 1938, p. 401 and W. Zschietzschmann, *Die hellenistische und römische Kunst (Die Antiken Kunst ii)*, Potsdam, 1938, p. 51, fig. 47.

<sup>6</sup> W. W. Hyde, *Olympic Victor Monuments and Greek Athletic Art*, Washington, 1921, p. 73.

<sup>7</sup> Helbig, *Führer*<sup>1</sup>, loc. cit.; M. Collignon, *Histoire de la sculpture grecque*, Paris, 1897, ii, 494, fig. 257.

<sup>8</sup> Lanciani, loc. cit.; E. Petersen, "Funde," *RM*. vi, 1891, p. 238; A. S. Murray, *Handbook of Greek Archaeology*, London, 1892, p. 306, fig. 100.

<sup>9</sup> Guy Dickens, *Hellenistic Sculpture*, Oxford, 1920, pp. 42 ff.

<sup>10</sup> A. J. B. Wace, "Hellenistic Royal Portraits," *JHS*. xxv, 1905, p. 96; cf. J. Six, "Ikonographische Studien," *RM*. xiii, 1898, pp. 77-8.

<sup>11</sup> R. Carpenter, "The 'Hellenistic Ruler' of the Terme Museum," *AJA*. xxxi, 1927, pp. 160-8 and, again, "Observations," *MAAR*. xviii, 1941.

<sup>12</sup> Lysippan (ranging from Lysippos' school to a general influence of the master) Klein, loc. cit.; H. Bulle, *Der schöne Mensch i*, Munich and Leipzig, 1911, col. 140-2; fig. 27, pl. LXXV; Helbig, *Führer*<sup>1</sup>, loc. cit.; A. Hekler, *Die Bildniskunst der Griechen und Römer*, Stuttgart, 1912, p. xxii, pls. 82-4; Dickens, Hyde, loc. cit. Refutation of the Lysippic attribution and Neo-Attic-Neo-Pheidian suggestion: Carpenter, "The 'Hellenistic Ruler' of the Terme Museum," pp. 160 ff. and "Observations," pp. 92-3, where the statue is tentatively attributed to Arkesilaios. Note J. J. Bernoulli, *Die erhaltenen Darstellungen Alexanders des Grossen*, Munich, 1905, p. 107. See, too, Ch. Picard, "Portrait d'homme inconnu," *MonPiot*. xxiv, 1920, p. 96; G. Krahmer, "Stilphasen der hellenistischen Plastik," *RM*. xxxviii/xxxix, 1923/24, p. 151 and "Hellenistische Köpfe," *NGGW*. Göttingen, 1936, pp. 236 ff., pl. iv, fig. 15, 16; G. M. A. Richter, *The Sculpture and Sculptors of the Greeks*, New Haven, 1930, pp. 50, 59, fig. 57; C. Michelowski, *Les Portraits hellénistiques et romains (Délos, xiii)*, Paris, 1930, pp. 4 ff., pp. 35 ff.; G. Lippold, *Gnomon* xii, 1936, p. 584.

<sup>13</sup> Museo nazionale romano, No. 545 (1055). Ht. (seated): 1.28 m; if standing: ca. 2.05 m., i.e., equal to the Ruler's height. Restorations: tip of left thumb, fragment on r. thigh, base. There appears to be one ancient restoration: a piece of the crown of the head: ca. 10 cm. in diameter. Style and quality of execution suggest that this piece replaced the original which was apparently cast separately in order to facilitate insertion of the eyes and teeth. Helbig, *Führer*<sup>1</sup>, pp. 136-9, No. 1350 and *AD*. loc. cit. and pl. iv; Paribeni, op. cit., p. 204; *BrBr*. op. cit., No. 248.





FIG. 3.—ROME, MUSEO NAZIONALE. BRONZE STATUE OF A BOXER



FIG. 4.—ROME, MUSEO NAZIONALE. BRONZE STATUE OF A BOXER



FIG. 5.—ROME, MUSEO NAZIONALE. HEAD OF THE BOXER.



he is resting after a contest or pausing in the midst of the fight,<sup>14</sup> whether he is turning around to the spectators for applause,<sup>15</sup> talking to his opponent or a referee,<sup>16</sup> glancing at his adversary,<sup>17</sup> looking around for a new encounter<sup>18</sup> or "attiré par le frémissement d'un combat voisin,"<sup>19</sup> whether he is an historical personality or an unknown victor<sup>20</sup> has been the subject of almost as much contention as whether he is breathing with his mouth open or speaking.<sup>21</sup>

Like the "Ruler," the "Boxer" had been emphatically dated all the way from the fourth to first centuries B.C. until the fortunate discovery of the signature of Apollonios, son of Nestor, provided a welcome finale to the debate.<sup>22</sup> Throughout the long dispute over the precise shade of meaning implied by the Boxer's figure and face, the basic assumption that he was the dedication of a victorious athlete has gone almost unchallenged.<sup>23</sup> Indeed, it has provided the material for innumerable laments on the decline of Hellenic culture in the Hellenistic period, on the degeneration of the noble ideals of Greek athletics and other melancholy conclusions.<sup>24</sup> But the fact remains that throughout the history of Greek sculpture there is no comparable victor monument<sup>25</sup> and, given the psychological improbability that any athlete would have

<sup>14</sup> Pausing in the midst of the fight: for example, E. Petersen, *Vom alten Rom*<sup>3</sup>, Leipzig, 1904, p. 165, fig. 134 and Bulle, *op. cit.*, col. 363-4, pl. 167, 236, but this conflict runs through the entire bibliography on the figure.

<sup>15</sup> Collignon, pp. 492-3, fig. 256; W. Amelung, *The Museums and Ruins of Rome*, New York, 1906, pp. 273 ff., fig. 156; Ch. Picard, *La Sculpture antique*, Paris, 1926, p. 208.

<sup>16</sup> Helbig, *Antike Denkmäler*, loc. cit.

<sup>17</sup> Zschietzschmann, *op. cit.*, p. 57, fig. 57.

<sup>18</sup> Murray, loc. cit.

<sup>19</sup> Reinach, loc. cit.

<sup>20</sup> The standard interpretation of the "Boxer" as the dedication of an unknown victor was challenged by Carl Wunderer, "Der Faustkämpfer in Museo delle Terme," *Philologus* lvii, 1898, pp. 1-7, 649. His attempt to identify the "Boxer" as the historical athlete Kleitomachos and to explain the statue according to Polybios xxvii, 9, 7-13, was refuted by E. Petersen, "Der Faustkämpfer des Thermenmuseums," *RM.* xiii, 1898, pp. 93-5; Amelung in Helbig, *Führer*<sup>3</sup> loc. cit., and Hyde, *op. cit.*, pp. 145 ff. See, too, J. J. Bernoulli, *Griechische Ikonographie*, Munich, 1901, ii, 179. If, for no other reason, the fact that Polybios gives no indication that Kleitomachos ever sat down and, on the contrary, uses the words ἀποστάνα and ἐπιστρέφοντα, renders this interpretation invalid.

<sup>21</sup> Speaking: Helbig, *AD*: loc. cit.; Lanciani, *op. cit.*, p. 306; Klein, *op. cit.*, pp. 44-46; F. Noack, "Die Statuen des Apollonios von Athen," *FuF.* 3, No. 25, pp. 193-4. Breathing with mouth open: C. Belger, "Zur Bronzestatue eines Faustkämpfers in Rom," *JdI.* ii, 1887, p. 192, followed by Amelung in Helbig, *Führer*<sup>3</sup>, loc. cit., and others.

<sup>22</sup> Carpenter, "Apollonios Nestoros," *MAAR.* vi, 1927, pp. 193-6, pls. xlix-li. For earlier opinions, see Klein, Amelung, Dickins, loc. cit.; Furtwängler, *SBAW.* 1902, p. 442; Springer-Michaelis, *Handbuch der Kunstgeschichte*<sup>19</sup>, Leipzig, 1911, p. 401, fig. 743; Hekler, *op. cit.*, pp. xxii-iii, pls. 85, 86 and, later, Richter, *op. cit.*, pp. 15, 50, 61, 299 (fig. 765); A. della Seta, *Il Nudo nell'Arte* i, Milan & Rome, 1930, pp. 561 ff., fig. 180-181; J. D. Beazley, B. Ashmole, *Greek Sculpture and Painting*, Cambridge, 1932, p. 34, fig. 202; K. Blümel, *Sport der Hellenen*, Berlin, 1936, pp. 11, 132-3; G. Lippold, *Timomachos*, Munich, 1937, p. 2. See, too, Carpenter, "Observations," p. 84.

<sup>23</sup> See below note 61.

<sup>24</sup> See, for example, F. Winter, "Über die griechische Porträtkunst," Berlin, 1894, pp. 12 ff.; Amelung, *The Museums and Ruins of Rome*, pp. 273 ff.; Bulle, loc. cit.; Hyde, *op. cit.*, pp. 145 ff. The archaeological theory of the brutal professional boxer has, in turn, been seized upon for its sociological implications, as in M. Rostovtzeff, *Social and Economic History of the Hellenistic World*, Oxford, 1941, ii, 1087.

<sup>25</sup> Thus Hyde, loc. cit., is unable to cite a single other example and Klein, *op. cit.*, pp. 44-6, remarks "Befremdend ist schon das Verlassen des obligaten Standmotivs."

<sup>26</sup> XXII, 44-52:

ἐνθα δ' ἀνὴρ ὑπέροπλος ἐνήμενος ἐνδιδάσκει,  
δεινὸς ἰδεῖν, σκληρῇσι τεθλασμένους οὐατα πυγμαῖς·  
στήθεα δ' ἐσφαίρωτο πελώρια καὶ πλατὺ νῶτον  
σαρκὶ σιδηρεῖη σφυρήλατος οἷα κολοσσός·



chosen this moment as a satisfying means of commemorating a victory, it is extremely unlikely that even one such monument ever existed.

How, then are we to interpret the "Boxer" and the "Ruler"? Happily, ancient literature seems to offer a far simpler and more coherent explanation of the various facets of this problem than modern discussion. In his *Hymn to the Dioskouroi*, Theokritos describes the landing of the Argo on the Bebrycian coast and relates how Kastor and Polydeukes, wandering together apart from their comrades, came upon a spring where

"there sat taking the air a man both huge and terrible to look at. His ears were crushed (or wounded) by hard fist fights, his giant breast and great broad back were orb'd with iron flesh like a sledge-wrought statue. Moreover, on his brawny arms, the muscles below the top of the shoulder stood out like boulders some torrent has rolled and rounded in its swirling eddies; and hanging by the ends of the feet, a lion's skin dangled over his neck and back."<sup>26</sup>

Standing beside this great seated brute, Polydeukes engaged him in a conversation, the results of which are well known. For, as it turned out, this was Amykos, king of the barbarian Bebrycians, whose inhospitable custom it was to challenge all strangers appearing in his land to a fist fight to the death. The ensuing contest between this legendary inventor of the caestus<sup>27</sup> and the celebrated hero-boxer in the presence of both Argonauts and Bebrycians was a favorite theme in Greek art and literature<sup>28</sup> in which this episode was seen as a conflict between brute strength and

ἐν δὲ μῦες στερεοῖσι βραχίουσιν ἄκρογ ὑπ' ὤμων  
ἕστασαν ἥτε πέτροι ὀλοίτροχοι, οὐστε κυλίνδων  
χειμάρρους ποταμὸς μεγάλας περιέξεσε δίναις·  
αὐτὰρ ὑπὲρ νώτοιο καὶ αὐχένος ἤωρεῖτο  
ἄκρων δέρμα λέοντος ἀφημμένον ἐκ ποδῶνων.

J. M. Edmond's text in *The Greek Bucolic Poets* (Loeb Classical Library), Cambridge, 1938, p. 258 and, especially ll. 44-52 quoted here. The English translation above is based on Edmond's with modifications. An interesting discussion of this idyll appears in U. von Wilamowitz-Moellendorf, *Die Textgeschichte der griechischen Bukoliker* (Philologische Untersuchungen hsg. von A. Kiessling and U. v. Wilamowitz-Moellendorf xviii) Berlin, 1906, pp. 186, 193 ff.

In the light of the present discussion, it is interesting to note that the early variant τεθραυσμένος (*Oxyrrynchus Papyrus* 1806) may well be preferable to τεθλασμένος. The scratches on the ears of the "Boxer" and the drops of blood below them which so many writers emphasize would suggest this reading. The debate as to whether the "Boxer's" various signs of injury are the product of old or new fights seems to have entirely overlooked the utter impossibility of distinguishing whether the swellings, scratches, and encrusted drops of blood depicted on a bronze statue were produced some minutes or hours or even days before the actual moment represented. To interpret such drops of blood as fresh rather than encrusted and then to pronounce them proof that the "Boxer" has just fought in the preceding minutes is arbitrary in the extreme. However the "Boxer" is interpreted, these injuries are surely to be taken as a graphic means of conveying his nature and occupation rather than as a specific reference to his condition at the moment.

<sup>27</sup> Scholion to Plato, *Laus* vii, 796 A: "Ἀμυκος δὲ Ποσειδῶνος καὶ Νύμφης βιθυνίδος ἢ Πελλίας ὃς καὶ ἐξεῦρεν ἱμάντας πυκτικούς (Allen, Burnet, Parker, *Scholia Platonica*, Haverford, 1938, p. 328) and Clement of Alexandria, *Stromateis* i, 16, 76: "Ἀμυκος δὲ ὁ βεβρύκων βασιλεὺς ἱμάντες πυκτικούς πρῶτος εὔρε. There is an excellent discussion of ancient boxing and of the types of gloves used in various periods, including the caestus or ἱμάντες ὀξεῖς or πυκτικοί of the Terme statue in E. N. Gardiner, *Greek Athletic Sports and Festivals*, London, 1910, ch. xix, pp. 402-434. Cf., too, *idem*, *Athletics of the Ancient World*, Oxford, 1930, pp. 106, 198 ff.; Hyde, *op. cit.*, pp. 235 ff.; Ch. Hülsen, "Il cesto dei pugili antichi," *RM.* iv, 1889, pp. 176 ff. and J. Jüthner, "Über antike Turngeräte" (*Abh. des arch.-epigr. Seminars der Universität Wien* xii) 1896, pp. 77 ff.

<sup>28</sup> The most detailed accounts are to be found in Theokritos xxii, 27-134; Apollonios Rhodios ii, 1-163 and Valerius Flaccus iv, 99-343. Brief references occur in Apollodorus i, ix, 20; Hyginus, *Fabulae*



skill, between barbarian inhospitality and the hallowed customs of Hellenic courtesy. In the preserved monuments and descriptions, Polydeukes' triumph over Amykos in the mortal fight which followed was the most popular incident in this episode, and it is only in Theokritos that the initial phase of the struggle is presented as a verbal clash between Polydeukes and Amykos in the presence of Kastor.

The analogy between Theokritos' description of this barbarian brute and the "Boxer" of the Terme (figs. 3-5) is so striking as to make a detailed comparison of the two unnecessary.<sup>29</sup> Not only do the specific characteristics tally exactly, but the general position of a seated figure twisting his head around and up to communicate with someone standing beside him is a remarkable confirmation of the discernment of those few archaeologists who have stoutly maintained that the "Boxer" was talking not panting and, as such, must have belonged to a group.<sup>30</sup> Furthermore, it is clear that in writing this description Theokritos had a specific statue in mind as the words *σιδηρεῖη σφυρήλατος οἷα κολοσσός* prove. Only one detail separates his boxer from ours: the lion's skin tied about Amykos' neck. Inasmuch as no other representation of Amykos shows a lion's skin on or near him, this detail cannot be considered part of the orthodox iconography of the figure. It is, of course, entirely possible that the Terme statue once sat on a lion's skin — a point which can never be settled one way or the other, since the original base is not preserved. However, quite apart from other stylistic considerations, this one detail is sufficient to indicate that the Terme statue can neither have been the source of Theokritos' description nor an exact copy of the statue with which he was familiar. For the moment, let us postpone any consideration of the precise chronological relationship between these monuments.

Returning to the specific scene visualized by Theokritos, if the Terme Boxer is, indeed, Amykos, as there is reason to believe, he should be accompanied by the Dioskouroi. Of necessity, Polydeukes must stand at his right and, given the established iconography of the Dioskouroi in pairs or groups of three, Kastor must witness the conversation from Amykos' left. Such a group of a seated figure flanked by two standing figures would be eminently within the tradition of Greek sculpture.

At this point, the "Ruler" leaps to mind. Found in the same place as the "Boxer," of the same material, identical in scale,<sup>31</sup> he appears to be so well-suited to the iconographic requirements of a Dioskouros that it seems reasonable to interpret him as Kastor, and to suggest that, at one time, he stood at Amykos' left. In this fortunate case, literature and art afford ample evidence of the correctness of an hypothesis.

Originally, the Dioskouroi were represented as nude young men without specific attributes.<sup>32</sup> Even the stars and piloi so commonly associated with them were a

xvii; Oppian, *Cynegetica* i, 363; *Orphic Argonautica*, 658 ff.; Sidonius Apollinaris, *Carmina* v, 160-3; Servius *ad Aeneidem* v, 373. For the source of Theokritos' version of the contest see Carl Robert, *Die griechische Heldensage* iii, Berlin, 1921, pp. 842-5.

<sup>29</sup> Lawrence came close to the point when, after describing the "Boxer," he said: "The ideal is repeated in literature by Theokritos, in a description of a boxing match" (*op. cit.*, p. 18, and pl. xxviii).

<sup>30</sup> Lanciani, *op. cit.*, p. 306; Paribeni, *op. cit.*, p. 204.

<sup>31</sup> Klein, *op. cit.*, pp. 44-6, was much impressed by all these facts and placed the two statues in the same period and school.

<sup>32</sup> For the iconography of the Dioskouroi see Furtwängler's article "Dioskuren" in Roscher, *Ausführliches Lexikon der griechischen und römischen Mythologie*, Leipzig, 1884-86, i, pt. 1, col. 1171 ff.



relatively late, and by no means indispensable, addition. Again and again, they appear in heraldic position on reliefs, gems and coins as nude heroes leaning on their spears, with or without stars in the field above them.<sup>33</sup> The ring-stones illustrated in figs. 6-7, p. 331,<sup>34</sup> are especially pertinent since they show the Dioskouroi in precisely the same position as the "Ruler," the hero at the right leaning on his spear with his left hand (as the unmistakable traces on the "Ruler's" left forearm indicate he did), with his right hand resting against his hip and his head turned toward the center. Fig. 6 is, in fact, identical, the ponderation of the right-hand Dioskouros duplicating that of the "Ruler" in every detail. As these examples suggest, this heraldic type was applied to simple representations of the twins as well as to compositions of three in which they flank a central figure.

Hence, in nudity, stance, and spear, in every detail of posture and position, the "Ruler" fits the requirements of a Dioskouros. And if we consider the last iconographic detail which characterizes him: the youthful beard engraved on his face (fig. 8), the identification becomes doubly clear. For, as has been recognized, this is neither the stubble of a man who ordinarily shaves nor the full beard of a mature man, but the first soft growth of a young man who has never shaved.<sup>35</sup> Although this is a comparative rarity in ancient art, it is by no means unknown. What is more, it is characteristic of the Dioskouroi according to a persistent literary and artistic tradition.

Thus, in contrasting Amykos and Polydeukes, Apollonios Rhodios specifically describes the son of Zeus as having "the bloom of the first down still on his cheeks."<sup>36</sup>

<sup>33</sup> Cf. F. Chapouthier, *Les Dioscures au service d'une déesse*, Paris, 1935, *passim*. Cf. too, E. Gerhard, *Etruskische Spiegel*, Berlin, 1863, *passim*. See, too, the recently published little group of Kastor and Pollux in the Walters Gallery, D. K. Hill, "Some Bronze Statuettes from Graeco-Roman Egypt," *Art in America* xxxi 1943, fig. 1. Although the figures are of a somewhat different iconographic type, they illustrate the existence of such groups in sculpture in the round as well as on various types of relief.

<sup>34</sup> Fig. 6, Hamilton Collection, British Museum No. 252: gold ring with round bezel inserted separately. In relief: Helen, draped and with crescent over head, standing between the Dioskouroi who are nude and lean on spears. Over each of latter, a star. Listed under the category: Graeco-Roman and Roman. F. H. Marshall, *Catalogue of the Finger Rings, Greek, Etruscan and Roman, in the Department of Antiquities, British Museum*, London, 1907, p. 43 and Chapouthier, *op. cit.*, p. 53 No. 35 (where it is apparently mistakenly listed as "pierre gravée"), and pl. xv. Fig. 7, Berlin, Antiquarium No. 2670: violet paste. Dioskouroi, nude, standing, leaning on spears, with crescent moon between them and stars over their heads (erroneously called "pilos étoilé" by Chapouthier). Below, offering table with objects on it. Furtwängler, *Beschreibung der geschnittenen Steine im Antiquarium*, Berlin, 1896, p. 123 and Chapouthier, *op. cit.*, p. 66, No. 58, figs. 6-7 are reproduced from Chapouthier's cuts on pp. 53 and 66. Note the tetradrachm of Syros illustrated by Chapouthier, *op. cit.*, pp. 242 ff., where a related type, applied to the Dioskouroi-Kabeiroi, is of definitely Hellenistic date. Cf. B. V. Head, *HN*,<sup>2</sup> Oxford, 1911, p. 492.

<sup>35</sup> As Delbrück, *loc. cit.*, and others have seen. Carpenter's suggestion, "Observations," pp. 81 ff., that this growth is the result of temporary neglect and a sign of mourning is unconvincing both because of the nature of the beard and because of the improbability that anyone would choose to perpetuate his appearance at such a moment. Whether or not the "Flaubart" is attractive to modern eyes, it had the logic, in antiquity, of indicating a given age and of reflecting a necessary stage on the way to the full beard customary in classical and heroic times. For an interesting parallel to the present case, also on an heroic figure, see the colossal basalt statue of Herakles in Parma (A. O. Quintavalle, *La regia galleria di Parma*, Rome, 1939, view on p. 15 and p. 40, No. 970. Croci photograph No. 4347.

<sup>36</sup> II, 43: ἐτι χνοάοντας ιούλους ἀντέλλων.  
The text and translations quoted here and in succeeding references to Apollonios are those of R. C. Seaton in the Loeb Classical Library (New York, 1930), or based on them.





FIG. 8.—ROME, MUSEO NAZIONALE. HEAD OF THE SO-CALLED HELLENISTIC RULER



FIG. 9.—ROME, VILLA GIULIA. DETAIL OF THE FICORONI CISTA



FIG. 10.—ROME, VILLA GIULIA. DETAIL OF THE FICORONI CISTA



FIG. 12.—ROME, VILLA GIULIA. ENGRAVED MIRROR



FIG. 13.—ROME, VILLA GIULIA. THE FICORONI CISTA

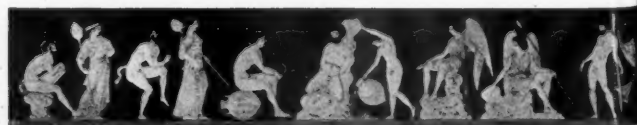


FIG. 14.—PARIS, BIBLIOTHÈQUE NATIONALE. RED-FIGURED HYDRIA



To Apollonios, this vital detail is a primary means of indicating the degree of maturity of the heroes. Hence Cyzicus, like Jason, has "the first growth of beard just sprouting" <sup>37</sup> while Meleager "was numbered among strong men though even the soft down on his cheek showed not yet." <sup>38</sup> The youthfulness of this heroic band was an established feature of what may be called their literary iconography and appears again in Valerius Flaccus' account of the assembly of heroes who came to join Jason, where both those "of approved renown in warfare" and "all they who in the first flower of manhood have passed not beyond essays nor been given the chance of glorious deeds" unite to take part in the great adventure. <sup>39</sup> Here, too, Polydeukes is described as "scarce as yet showing the sparse beard of earliest manhood" at the time of his contest with Amykos. <sup>40</sup> In the *Argonautica*, Kastor appears rather as the companion of his brother than as the hero of any individual deed and, as such, he is not specifically described. That what was true of the physical appearance of one of the Twins applied to the other goes without saying.

Fortunately for the present discussion, this curious iconographic tradition is reflected in art as well as literature. The popularity of the Bebrycian episode is attested by a variety of monuments, the finest of which is unquestionably the Ficoroni cista <sup>41</sup> (figs. 9, 10, 13). Unlike the majority of our literary sources, they reflect a lost epic and dramatic tradition according to which Polydeukes concluded his victory over Amykos by tying him to a tree trunk instead of leaving him sprawled on the shore. <sup>42</sup> But the dramatis personae of the episode are identical and looking at the Ficoroni cista, one finds that a number of figures on it are represented as having the now familiar bloom on their cheeks. Personally, I believe that the four figures on whom this detail is most conspicuous can be shown to resolve themselves into two representations each of Kastor and Polydeukes. They are the figures of Polydeukes binding Amykos, of Kastor looking on at the scene from the ship, of Polydeukes punching the κώρυκος, and of Kastor drinking from a kylix. <sup>43</sup> But whether or not one accepts this particular identification, the fact that the youthful beard appears within

<sup>37</sup> I, 972: ἐπισταχέεσκον ἱούλοι.

<sup>38</sup> III, 518-20:

σὺν δὲ καὶ Οἰνεΐδης ἐναρίθμιος αἰζηοῖσιν  
ἀνδράσιν, οὐδὲ περ ὅσσον ἐπανθιόνοντας ἱούλους  
ἀντέλλων.

<sup>39</sup> I, 100-102: Omnis avet quae iam bellis spectataque fama  
turba ducum, primae seu quos in flore iuventae  
temptamenta tenent needum data copia rerum.

Text and translation of J. H. Mozley (Loeb Classical Library), Cambridge, 1934, pp. 10-11. The same tradition is at the root of Hyginus, *Fabulae* xiv, 46 ff.

<sup>40</sup> IV, 233: etiam primae spargentem signa iuventae. In this context, *spargentem signa* can only mean growing a beard. Note the use of the same criterion to characterize the appearance and age of young Romans in Cicero, *Ad Att.* i, 16.

<sup>41</sup> For bibliography on the Ficoroni cista see the note appended to this article.

<sup>42</sup> Scholion to Apollonios Rhodios ii, 98: Ἀπολλώνιος μὲν ἐμφαίνει ὡς ἀνηρημένον τὸν Ἀμυκόν, Ἐπίχαρμος δὲ καὶ Πείσανδρος φασὶν ὅτι ἔδρασε αὐτὸν ὁ Πολυδεύκης, Δηϊοχος δὲ ἐν πρώτῳ περὶ Κυζίκου καταπυκτευθῆναι φησὶν αὐτὸν Πολυδεύκου. For a brief discussion of this literary background see Robert, *loc. cit.*

<sup>43</sup> See the note appended to this article for a proposed interpretation of the Ficoroni cista. Although it is impossible to check this detail on available photographs or casts, Helbig, *Führer* ii, 198, No. 957, says that the "Boxer" is infibulated. Note that on the Ficoroni cista, too, this is true of Amykos.



the circle of the Argonauts in general and is specifically applied to Polydeukes cannot be questioned.

In the light of this well-established literary and artistic tradition and of the facts previously stated in regard to the so-called "Ruler's" appearance, it is reasonable to interpret him not as a prince or an athlete, but as a Dioskouros. Given his appearance in every iconographic detail, large and small, and the iconographic requirements of the proposed group, it is legitimate to conclude that he is the Dioskouros Kastor and that he stood at the left of the seated Amykos.<sup>44</sup>

By a strange paradox, the very dissimilarity of conception which has previously prevented the association of these two statues now affords a striking confirmation of the interpretation advanced here. The marked contrast between the uncouth boxer and the heroic youth is seen as an intentional expression of the fundamental difference in nature between the barbarian brute and the Greek hero.<sup>45</sup> In this respect, Kastor and Polydeukes are, of course, identical. Therefore, Apollonios' description of the two opponents as they approach the contest is equally applicable to Amykos and Kastor and as such is, again, so pertinent as to eliminate the need for further discussion of this point:

"Nor were they alike to behold in form or in stature. The one seemed to be a monstrous son of baleful Typhoeus or of Earth herself, such as she brought forth aforetime, in her wrath against Zeus; but the other, the son of Tyndareus, was like a star of heaven whose beams are fairest as it shines through the nightly sky at eventide. Such was the son of Zeus, the bloom of the first down still on his cheeks, still with the look of gladness in his eyes. But his might and fury waxed like a wild beast's."<sup>46</sup>

The marked technical similarities in execution which have repeatedly been noted in discussions of the "Boxer" and the "Ruler" provide substantial support for the

<sup>44</sup> At this point, it is amusing to recall Bulle's characterization of the "Ruler" (*loc. cit.*) as having "einem Ausdruck von unwirschen Fragen und misstrauischer Aufmerksamkeit"—a thoroughly understandable expression for the witness of a conversation so extraordinary from the Greek point of view.

As Dickins realized (*loc. cit.*), and as the present discussion indicates, at this late period of Greek art there is no need to consider the marked individuality of the "Ruler's" face an indication of portraiture in the usual sense. It may conceivably reflect the precise appearance of the sculptor's model. An unpublished fourth-century Faliscan vase in the Museum of Fine Arts, Boston (Inv. 07.862; M.F.A. negative No. 5433), on which the binding of Amykos is represented, shows a Polydeukes every bit as individual as our Kastor. On the other hand, it is not beyond the realm of possibility that historical personages may have had themselves represented in this mythical guise. It may be well to remark at this point that the frequently repeated dictum that the "Ruler" represents a man in the mid-thirties is obviously incorrect. Quite apart from the evidence already cited in regard to this specific case, the impossibility of being overly precise about the exact age of a mature figure is splendidly illustrated by Pliny's characterization of the Doryphorus as *viriliter puer* and of the Diadumenus as *molliter iuuenis* (NH. xxxiv, 55). Without these terms, it would be easy to make a similar mistake in determining the respective ages of the Polykleitan figures. It is only the presence of the "Ruler's" youthful beard and the clear reference to such a beard in literature that make a more than usually precise indication of his age possible.

<sup>45</sup> Such differences as the greater refinement of the "Ruler's" toes and fingers, the more emphatic articulation of certain anatomical details noted by Carpenter, "Observations," pp. 92-3, are reflections of the artist's detailed characterization of the divine hero and his clear differentiation between the extremes of nature and background juxtaposed in this context.

<sup>46</sup> II, 37-45:

οὐ δέμας, οὐδὲ φὴν ἐναλγικοί εἰσοράσθαι.  
ἀλλ' ὁ μὲν ἢ ὀλοοῖο τυφώος, ἥ καὶ αὐτῆς  
Γαίης εἶναι ἔϊκτο πέλωρ τέκος, οἷα πάροιθεν  
χωμένη Διὶ τίκτεν· ὁ δ' οὐρανίῳ ἀτάλαντος  
ἀστέρι Τυνδαρίδης, οὔπερ κάλλισται ἔασιν



cogent iconographic reasons for associating the two statues.<sup>47</sup> Indeed, it is eminently plausible to assume that they formed part of a group of the Dioskouroi and Amykos and to interpret them as Amykos and Kastor. Given the typological analogy between this statue of Kastor and the heraldic compositions of Dioskouroi cited earlier, it is likely that the hypothetical figure of Polydeukes which must have completed the group was exactly parallel in type to the preserved figure of Kastor. The illustration of the three statues shown in fig. 11 is based on that assumption.<sup>47a</sup> However, the fact that such analogous representations of the Dioskouroi occasionally show minor variations, that the left figure at times carries a chlamys over his arm while the right does not, or the left figure repeats the stance of the right instead of exactly reversing it makes it unwise to be overly specific on this score.<sup>48</sup>

ἔσπερίην διὰ νύκτα φαινομένου ἀμαρυγὰι.  
τοῖος ἔην Διὸς υἱός, ἔτι χνοάοντας ἰούλους  
ἀντέλλων, ἔτι φαίδρὸς ἐν δμμασιν ἄλλὰ οἱ ἀλκή  
καὶ μένος ἥύτε θηρὸς ἀέξετο.

For a similar contrast between personalities and appearances see the relief of Theseus and Sinis, H. von Rohden, *Architektonische römische Tonreliefs der Kaiserzeit*, Berlin and Stuttgart, 1911, i, 246; ii, pl. xiii.

<sup>47</sup> These details, which are best summarized by Carpenter, "The 'Hellenistic Ruler' of the Terme Museum," *op. cit.*, p. 163, and "Observations," pp. 92-3, include the similar rendering of the hair on the body by incision, certain devices used in rendering the hair of the head, the treatment of the back, etc. One technical difference separates the two statues: the insertion of the eyes. On the "Ruler" they were placed in the sockets from outside the head; on the "Boxer," they were fixed from within the head (hence the separately worked and removable section of the crown indicated in note 13). As has been generally recognized, the reason for the latter technique was apparently the additional need to insert teeth in the "Boxer's" open mouth. Therefore, this variation in technique was occasioned by the different requirements of the two statues rather than by any theoretical difference in studio procedure. For additional technical discussion of the "Boxer" see Helbig, *Führer*, *loc. cit.*; Petersen, "Der Faustkämpfer des Thermennuseums," *loc. cit.*, and E. Pernice, "Untersuchungen zur antiken Toreutik," *JOAI*, xi, 1908, pp. 225-8.

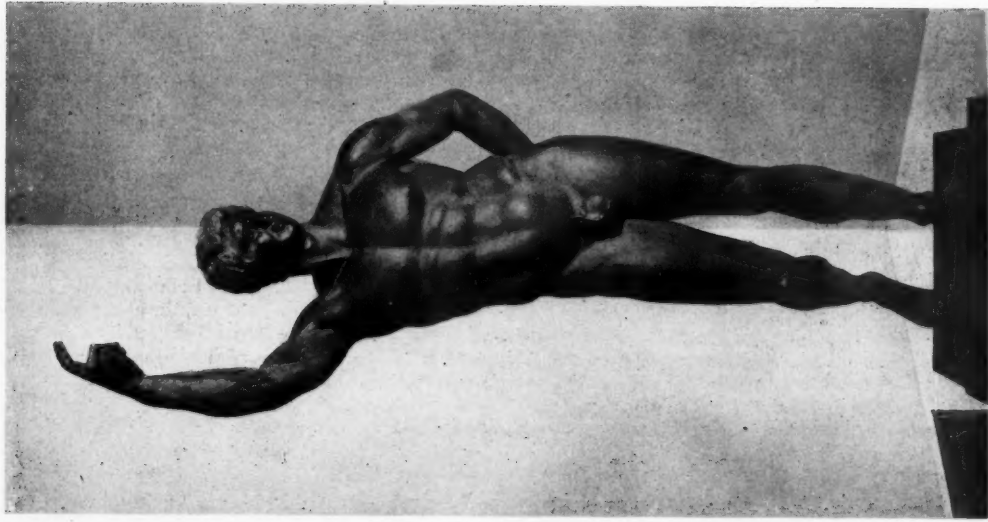
<sup>47a</sup> Fig. 11 shows the individual statues of Amykos and Kastor as they appear when seen directly from the front—a view which does not occur among the many previously published illustrations of these statues. It may also give a rough impression of the meaning of the group, of the precise moment illustrated, of the action and interrelationship of the three figures. It is evident both from the twist of Amykos' head and from the relative positions of Polydeukes and Amykos on the mirror illustrated in fig. 12, p. 338, discussed below that in the actual group the Dioskouroi stood somewhat behind the Boxer who, therefore, looked considerably larger in relation to the Twins than he does in the present illustration. (It will be recalled that the scale of the statues is identical.) The fact that the present photographs were not taken from the same height offers an additional source of error. Without dismounting either statues or casts and placing them correctly on a common base, it is not possible to make an exact reconstruction of the group. Therefore fig. 11 does not and cannot convey an accurate impression of either the scale or the precise position of the figures.

The photographs of Kastor and Amykos were taken from casts of the "Boxer" and the "Ruler" in the Metropolitan Museum of Art with the kind permission of Miss Gisela M. A. Richter; the illustration of Polydeukes was obtained by printing the negative of Kastor in reverse.

<sup>48</sup> It is possible, too, that Polydeukes may have been somewhat less bearded than Kastor. On the Ficoroni cista, there is a slight differentiation between the amount of hair visible on the faces of Polydeukes and the Argonaut sitting in the ship, whom it seems reasonable to interpret as Kastor (see note appended to this article), and it is Kastor whose beard is the more advanced of the two. This minor detail is a graphic example of the persistence of strict iconographic types in Greek and Roman art. According to Pausanias v, 19, 2, one of the Dioskouroi on the chest of Kypselos was bearded, the other unbearded, a rare tradition still alive in the Hadrianic period as the interesting medallion discussed by Chapouthier, *op. cit.*, pp. 64 ff. illustrates. Here, too, the head identified as Kastor is slightly bearded, while that of Pollux is not. Apropos of a slight differentiation in representations of the Dioskouroi, cf. Plutarch, *Tiberius and Gaius Gracchus* ii, 1.

It is idle to speculate at length on what may have happened to this hypothetical statue of Polydeukes

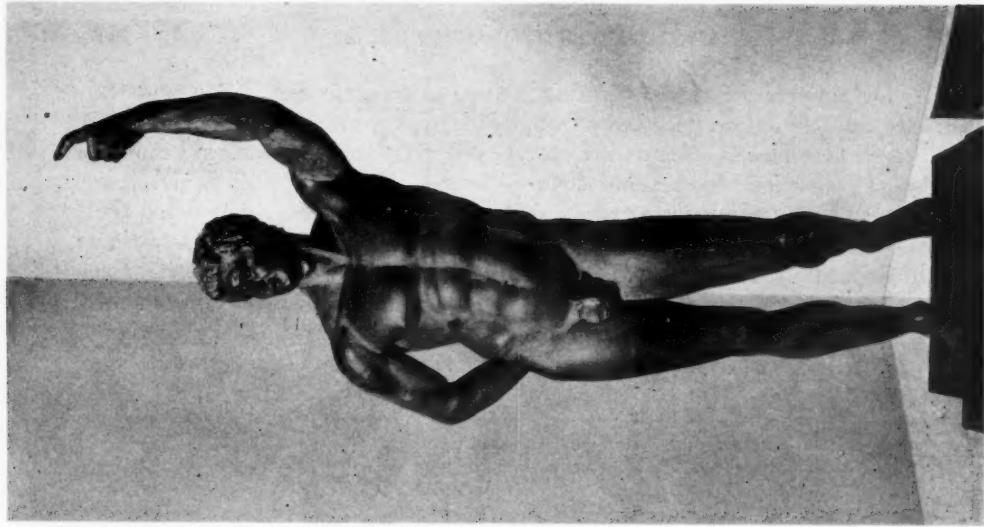




A



B



C

FIG. 11.—AMYKOS AND THE DIOSKOUROI B AND C: CASTS OF THE STATUES IN THE MUSEO NAZIONALE SHOWING DIRECT FRONT VIEWS OF THE INDIVIDUAL STATUES. A: PRINT OF C IN REVERSE. THIS IS *not* TO BE INTERPRETED AS A RECONSTRUCTION OF THE GROUP IN THE STRICT SENSE OF THE WORD. SEE NOTE 47A



It may be assumed that figures united in a common action stood on a common base. This is further borne out by the fact that in cleaning the "Boxer," or shall we say, Amykos, an A was discovered on the bottom of the left foot on the first joint of the middle toe.<sup>49</sup> The letter had apparently been inscribed on the original model for the bronze statue and cast with it. Still another A, this time of Latin form, was incised on the surface of the bronze on the upper side of the right foot shortly above the toes. These letters are best understood as setting marks. They suggest that the original base on which the seated figure was mounted was marked with a matching A to serve as a guide in setting up the statue: once the A's were connected, the figure was in place. This simple device would be quite unnecessary in mounting a single statue on an individual base but is most appropriate in the case of a group. The existence of a second comparable letter differing from the first in technique, style, and position implies that sometime in the course of the statue's history it was dismantled from its base, at which time the A on the base became visible and its purpose apparent, leading a later and less careful workman to indicate hastily on the right foot the approximate point where the statue should be replaced on the base. As we shall see, this explanation is entirely compatible with what appears to have been the late antique history of the group.

Indeed, our group has more than its share of curious inscriptions. The discovery of the artist's signature on a thong of the "Boxer's" left caestus is well-known,<sup>50</sup> and it is currently assumed that the sculptor revealed by this signature, Apollonios, son of Nestor, was a famous Athenian master working in Rome toward the middle of the first century B.C. If, as it now seems, Apollonios was the author, not of a single statue but of an over life-size group, his personality gains considerably in interest, and the suggestion that he was none other than the celebrated artist called to make the chryselephantine statue of Jupiter for the Capitoline temple grows in credibility.<sup>51</sup>

if the theory proposed here is correct; but the fact that the two existing bronze statues were accidentally excavated in the course of the completely unprofessional, unsystematic digging of contractors and the curious circumstances described by Lanciani (*op. cit.*, pp. 297 ff.) make it altogether possible that our Polydeukes may still be buried in that region. The precious statues were obviously hidden away in the perilous days of late antiquity (see Lanciani, *op. cit.*, pp. 295 ff.). On the other hand, it is equally possible that if one statue of such a group became damaged, the other two might be retired to the basement and, therefore, separated from it. For additional discussion of the provenance of the statues see below and note 62.

<sup>49</sup> NS. x, 1885, p. 223; Helbig, *AD. loc. cit.*; Lanciani, *loc. cit.*

<sup>50</sup> Carpenter, "Apollonios Nestoros," *loc. cit.* Carpenter's discovery and a date toward the middle of the first century B.C. have been generally accepted. However, it should be noted that E. Löwy, *In-schriften griechischer Bildhauer*, Leipzig, 1885, p. 241, No. 343, lists the Apollonios Nestoros signature on the Belvedere Torso under "Kaiserzeit" and B. D. Meritt has very kindly informed me that he, too, is inclined to prefer a date later than the first century B.C., although acknowledging the difficulty of dating inscriptions of this period. A comparison of the facsimiles of the two inscriptions indicates that the sloppy, irregularly carved Belvedere inscription is quite unlike the regular signature on the "Boxer" in so far as neatness and precision are concerned. Furthermore, the psychology of the artist who left his signature on a virtually invisible thong of the "Boxer's" glove is startlingly unlike that of the sculptor who scrawled the signature in so conspicuous and unusual a place on the Belvedere Torso. From a stylistic standpoint, it still seems impossible to date either the Torso or the "Boxer" at any other time than the first century B.C. Can it be that the Belvedere Torso is a first century A.D. marble copy of a bronze original made in the first century B.C. by Apollonios Nestoros, and that the copyist quite understandably emphasized the fact that this was the work of the now famous earlier artist? It is tempting to think so, given the various factors involved.

<sup>51</sup> Carpenter, "Observations," pp. 81-4. Cf. Amelung, article "Apollonios" (VII and IX) in Thieme-Becker, *Allgemeines Lexikon der bildenden Künstler*, Leipzig, 1908, II, 34.



Whether he produced the bronze group of Amykos and the Dioskouroi entirely by himself or with the aid of assistants cannot be determined. But, in any case, the additional inscriptions on Kastor offer unexpected confirmation of the date generally assigned to Apollonios.

Unfortunately, the enigmatic Latin inscription incised on Kastor above the navel is as inexplicable today as it was sixty years ago.<sup>52</sup> To judge by the form of the P, it is Republican. More cannot be said. The second inscription was engraved on the right thigh and is a monogram consisting of the punched letters M A R in ligature.<sup>53</sup> This abbreviation appears several times on Republic coinage, but it is only on the coins of Gaius Claudius Marcellus that a monogram identical in form and equally without any indication of the first name occurs.<sup>54</sup> The exact analogy of these monograms is of great interest, since it suggests that Gaius Claudius Marcellus was in some way connected with Apollonios' group. Marcellus was consul in 49 B.C. In the normal course of events, he must have been aedile toward the end of the preceding decade and, as aedile, was in charge of public works.<sup>55</sup> That Apollonios' group came

<sup>52</sup> L · VI · P · L · X X I I X reproduced in facsimile by Helbig, *AD. loc. cit.*, and also correctly transcribed by Brunn-Arndt, *Griechische und römische Porträts*, *loc. cit.* In NS. p. 52 and Lanciani, *loc. cit.*, the initial letters of the inscription are incorrectly given as L · V I S · instead of L · V I · P. Also mentioned by Helbig, *Führer*<sup>3</sup>, *loc. cit.*, and Collignon, *loc. cit.*

Helbig, *Führer*<sup>3</sup>, refers to a similar inscription incised on the outside of the left hind leg of the bronze horse in the Palazzo dei Conservatori which reads L · I · X X I I X (H. S. Jones, *The Sculptures of the Palazzo dei Conservatori*, Oxford, 1926, p. 171, No. 4). In addition, Herbert Bloch has very kindly called my attention to a third inscription of this type on the base of the statue of M. Minucius, the dictator (Dessau, *Inscriptiones Latinae Selectae* i, Berlin, 1892, No 11), which reads L · I · X X V I. As Bloch points out, this inscription probably should be classed with those on the "Ruler" and the horse rather than with the "massae marmoris." It has been suggested that the inscription on the "Ruler" indicates the place where the statue was to be erected, L · V I equalling *loco sexto*. (By Brunn-Arndt, Helbig-Amelung, Collignon, *loc. cit.*), but no explanation has been offered for the remainder of the inscription. The occurrence of three such inscriptions on what appear to have been public monuments points toward some kind of official cataloguing. It should be noted that one of these sculptures was an honorary statue made in Rome early in the Republic, that the second (the horse), was apparently a Greek work of art imported to Rome, while the third was produced during the last years of the Republic. Although each of these three inscriptions begins with L, followed by a low number in turn succeeded by a high number, two (those on the horse and the base) show a bewildering agreement in regard to the first or low number; again, one of these two (that on the horse), although differing from the third (the one on the "Ruler") in so far as the first number is concerned, has precisely the same last number! Under the circumstances, it seems highly probable that these inscriptions refer to some kind of census taken by a magistrate and corresponding to some variety of record kept in an archive. Such magistrates would constitute predecessors of the special curators of public monuments known in the Empire. During the Republic, the censors or aediles might have been concerned with such tasks (see T. Mommsen, *Le droit romain public* iv, 1897, pp. 139, 169 ff. 183 ff., 202, 212 and vii, 1891, p. 408, note 1). Our literary sources and epigraphical records give no exact indication as to the nature of this supervision or the administrative practices connected with it. However, Pliny, *NH.* xxxiv, 93, mentions the inscription of an aedile on the base of a statue of Hercules in which this magistrate recorded the action he had taken in restoring this piece of sculpture to public ownership. In addition, this statue bore two earlier inscriptions.—One might be tempted to recognize in the persistent occurrence of L followed by a numeral in the three inscriptions discussed in this note, a reference to a *liber* of some archive such as the one mentioned by Cicero, *Ad Att.* xiii, 33, 3 for records of the *senatus consulta*. But all this remains in the realm of speculation. I am indebted to my husband for the references and suggestions made throughout the latter part of this note.

<sup>53</sup> Reproduced in facsimile, Helbig, *AD. loc. cit.* Referred to by Helbig, *Führer*<sup>3</sup>, pp. 133 ff. and Six, *loc. cit.*

<sup>54</sup> H. A. Grueber, *Coins of the Roman Republic in the British Museum*, London, 1910, ii, 558, and note 1 on p. 466. For the Claudii Marcelli, see the article "Claudius," *RE.* v. III, Stuttgart, 1899, col. 2731-2.

<sup>55</sup> See the article "Aedilis" in *RE.* i, 1894, col. 451.



under this category can scarcely be doubted and it is, therefore, likely that it was installed and officially approved in the latter years of that decade. Although we do not know exactly what this procedure entailed or precisely what such a monogram implies, in any case, the group must have been completed by that time. In this fortunate instance, sound stylistic analysis of the two statues and the character of both Greek and Latin inscriptions have yielded an identical date.<sup>56</sup> The assumption that Apollonios, son of Nestor, worked in Rome shortly before the middle of the first century B.C. receives astonishingly precise confirmation as a result of these interrelationships.

The exact connection between this late Republican group of Amykos and the Dioskouroi and the group known to Theokritos is difficult to define. That the statue of Amykos to which the poet referred was not an independent unit but formed part of a group may be inferred by the same reasoning previously indicated in regard to Apollonios' "Boxer." And, as we have seen, the presence of a lion's skin knotted about the neck of Theokritos' statue precludes the possibility that the later group can be an exact copy of the earlier. All one can say is that this earlier group cannot have been made later than the first part of the third century—although it may have been made considerably earlier—that it most likely stood somewhere in the Greek East, and that Apollonios was familiar with this iconographic tradition either through direct knowledge of the group itself or via lost monuments which may have reflected it.<sup>57</sup>

Some such iconographic tradition certainly existed and must have inspired the Praenestine mirror shown in fig. 12.<sup>58</sup> Here, the group of three figures is seen from an oblique angle but it consists of the same elements: a seated figure flanked by two standing figures. Again, AMUCES turns to his right to communicate with POLOCES and, again, a third figure looks on from the right. However, this time the spectator is LOSNA. Given the marked analogy in position between the goddess and our Kastor, it is tempting to explain Luna as a transformation of the Dioskouros who logically belongs to this scene. Both the episode of Polydeukes binding Amykos and representations of the Dioskouroi with their sister Helen commonly occur on Etruscan and Praenestine mirrors. In this instance, as in so many others, the types have been garbled, whether intentionally or not. The additional fact that certain elements of the scene on this mirror appear to be related to a version of the Amykos story on a cista known to me only by general description<sup>59</sup> makes it ill-advised to attempt a precise explanation of the genesis of the figure of Luna. Still, it can scarcely be denied that this mirror reflects an iconographic tradition closely related to our

<sup>56</sup> In addition to Carpenter's articles see, for example, G. Krahmer, "Die Statuette eines Mädchens in Budapest," *Archaeologiai Ertesítő* xli, 1927, pp. 266 ff. and "Hellenistische Köpfe," *op. cit.*, p. 244; Müller, *op. cit.*, pp. 411–12. See, too, note 50.

<sup>57</sup> Note the possibilities suggested years ago by Kaschnitz in *Gnomon* iii, 1927, p. 190.

<sup>58</sup> Rome, Villa Giulia, No. 24864 (K). A. della Seta, *Museo di Villa Giulia*, Rome, 1918, p. 486; Helbig, *Führer* ii, 309, No. 1756. Gerhard, *op. cit.*, No. CLXXI, pp. 165 ff., noted that there was supposedly another mirror of this type in the library in Madrid and suggested that it might be a cast. See, too, G. Matthies, *Die pränestinische Spiegel*, Strassburg, 1912, pp. 52, 61, 74, 101; K. Schumacher, *Eine pränestinische Cista*, Heidelberg, 1891, p. 71; F. Behn, *Die Ficoronische Cista*, Leipzig, 1907, p. 63. Otto Jahn, *Die Ficoronische Cista*, Leipzig, 1852, pp. 56 ff., pointed out the connection between the egg-like object on the pillar at the right of the scene and the *salae* of the circus later associated with the Dioskouroi—a most interesting detail in the present context. For *ovaria* in the circus, see, for example, Dessau, *op. cit.* 5661. Additional discussion of this point: Gerhard, *loc. cit.*

<sup>59</sup> Matthies, *op. cit.*, pp. 71–2 re: Gagliardi No. 514 and Behn, *op. cit.*, p. 80, note 21.



group. In each case, the Bebrycian episode is represented in terms of three figures: a seated Amykos turning toward his opponent Polydeukes in the presence of a third figure. In each case, the relationship between the future contestants is identical. Furthermore, as has long been noted,<sup>60</sup> the figures of Amykos are strikingly similar, especially if one considers what an uncommon type this is. The fact that the engraver has enlivened his scene, has emphasized its meaning by causing the boxers to gesticulate, is thoroughly in keeping with the more descriptive nature of his medium and with the lack of regard for accuracy which allowed him to represent the traditionally hairy barbarian as unbearded. One gets the impression that the original meaning of this contest was unknown to the engraver, who saw in it simply another boxing match between two athletes. This may account for the jaunty appearance of Polydeukes, unless a totally different statuary type has replaced the original here, as the separate base might conceivably indicate.<sup>61</sup>

However this may be, it is safe to assume that this curious mirror, which is gen-

<sup>60</sup> Otto Rossbach, "Amykos," *Festschrift für Otto Benndorf*, Vienna, 1898, pp. 148-152, an article which appears to have escaped writers on the "Boxer" since Amelung's discussion of the theory in Helbig, *Führer*, *loc. cit.* I, too, had arrived at my present conclusions before finding this article which deserves comment because of its curious mixture of accurate connections and inaccurate observations. On the basis of two coin-types struck by Antoninus Pius and Geta in Lacedaemon, of the Theokritos passage and the mirror, Rossbach rightly interpreted the "Boxer" as Amykos. He did not proceed further with his material or connect the "Boxer" with either the specific moment indicated by Theokritos or with any other statue. Instead, he thought of Amykos as resting in the midst of his struggle with Polydeukes. The original objections to explaining the "Boxer" as an isolated statue, therefore, still stand, in addition to new objections to the theory of an Amykos pausing in the middle of the fight pointed out by Amelung. Most important, the numismatic connections made by Rossbach were entirely faulty. A comparison of the badly worn bronze coin of Antoninus Pius (P. Gardner, *Catalogue of Greek Coins, Peloponnesus*, London, 1887, pl. xxv, 15) and the coin struck under Geta (Imhoof-Blumer-Gardner, *A Numismatic Commentary on Pausanias*, reprinted from the *JHS*, 1885-87, pl. N, xviii) indicates that the coins are identical in type. The two parallel lines running beside the left arm of the seated male figure on the earlier coin are seen to be the staff of the later coin, as the curving line below the abdomen and the indications of folds still discernible across the thighs are the garment of the later coin and account for the blurred, shapeless effect of this part of the figure—an effect inexplicable if the legs were bare. As logic would suggest, these coins, representing a seated bearded man with a garment over his legs and leaning on a staff, issued successively for the same region, portray the same individual, and the draped figure leaning on a staff is not Amykos as he was represented in ancient art or described in ancient literature, whether or not both types show seated bearded men twisting their heads around. The seated man turning his head is not in itself indicative of identity—witness the youthful Herakles on the coinage of Phaestus (W. Wroth, *Catalogue of the Greek Coins of Crete and the Aegean*, London 1886, pl. xv, 7). Consequently, Rossbach's worn Antonine coin not only has no caestus on it (his chief point of comparison produced, apparently, by misunderstanding a break and shadow near the elbow) but bears a substantially different type. Given the marked similarity between these Lacedaemonian coins and the gem engraved by Tischbein and illustrated by K. F. Johansen, "Hoby-Fundet," *Nordiska Fortidsminda* ii, Heft 3, p. 133, fig. 11, it is tempting to interpret this type as Philoctetes. In a later note ("Der Torso von Belvedere," *AA.* 1920, cols. 57-61), Rossbach returned to these coins, this time connecting the Belvedere Torso with the coin struck under Geta. He still maintained his original thesis that the coin represented Amykos and that the example struck under Antoninus Pius showed a nude figure. Nevertheless, he insisted that both the coins, the Terme Boxer and now the Belvedere Torso were all similar statues of Amykos—a completely untenable position. For not only are the coins identical in type, but it is impossible to relate a draped figure leaning on a staff with a nude boxer, no matter how analogous their formal attitudes may be. To be sure, the Belvedere Torso is not unlike this coin-type and once that type is surely identified, it might throw light on the Torso. The idea that they both represent Philoctetes is worth exploring.

<sup>61</sup> If Matthies (see note 59) is right in describing the Gagliardi cista as showing Polydeukes in an attitude similar to that on the mirror, the problem becomes additionally complicated.



erally considered contemporary with the Ficoroni cista and dated sometime before the middle of the third century B.C.,<sup>62</sup> is a loose reflection of our iconographic type and, incidentally, an indication of how widespread that type must have been.

The implications of Polydeukes' triumph over Amykos and the plausibility of interpreting the Terme statues in the light of this episode are confirmed by their provenance. Like the Dioskouroi of Monte Cavallo, they were found in the Baths of Constantine.<sup>63</sup> Where they stood in the first century B.C., it is impossible to determine, but in the fourth century, they were carried off to adorn the emperor's elegant new baths, and it was probably at this time that the Latin A was inscribed on Amykos' foot. As part of a group recalling a famous athletic contest, they were peculiarly appropriate for re-use in this setting. From Pindar to Pausanias, the Dioskouroi are celebrated as the protectors of all gymnastic activity.<sup>64</sup> In this capacity, they were honored at the entrance to the hippodrome in Olympia.<sup>65</sup> Apollonios' group, with its specific reference to the victory of gymnastic training and athletic skill over brute strength was as suitable to the function of the baths as its artistic distinction was to their decoration. Given the traditional connection between the Dioskouroi and the athletic sphere, and the constellation of facts already presented in connection with these statues, their provenance may be considered perfectly in harmony with the interpretation suggested here.

Reconstruction of the work of a famous master is of as great value to the student of ancient sculpture as precision of date. Together they afford the means of understanding stylistic developments. The work of Apollonios Nestoros is, therefore, of particular interest, since it provides a relatively fixed point in a period as yet full of uncertainties. The stylistic implications of his group of Amykos and the Dioskouroi deserve careful analysis—a task beyond the limits of the present investigation. It must suffice to remark that his very combination of two such contrasting figures, his conscious drawing upon different artistic traditions to express different ideas and convey different impressions was the expression of an eclectic point of view destined to become of vital importance in the development of later Roman sculpture.

NEW YORK CITY

PHYLLIS L. WILLIAMS

<sup>62</sup> For opinions about the date of these monuments see the references cited in note 59 and the note appended to this article.

<sup>63</sup> Cf. S. B. Platner, Thomas Ashby, *A Topographical Dictionary of Ancient Rome*, London, 1929, pp. 525 ff.; G. Lugli, *I monumenti antichi di Roma e suburbio*, Rome, 1938, iii, pp. 307 ff. Lanciani, *loc. cit.*, also considered that the statues came from the Baths of Constantine, although he identified the exact spot where they were found as part of the substructure of the Temple of the Sun. In the more up-to-date discussions of Platner and Ashby and Lugli, this very spot, too, is considered part of the actual baths which, it will be recalled, were adjacent to Aurelian's temple. Lugli remarks that the relatively small size of these baths, combined with their particular refinement, and their proximity to the Baths of Diocletian suggests that they were built for a select public in the aristocratic quarter of the Quirinal—an interesting point in the present connection.

<sup>64</sup> Cf. Furtwängler, *op. cit.*, col. 1156 and note the phrase in Lucian, ὑπὲρ τῶν εἰκονῶν xix, where Polydeukes and Herakles are both referred to as τοῖς ἐφόροις τῶν ἀθλητῶν θεοῖς. That this specific connection of the Dioskouroi with the gymnasium and its traditions was still alive in late antiquity is indicated by Sidonius Apollinaris, *Carmina* v, 160 ff.

<sup>65</sup> Pausanias v, 15, 5. Rossbach's suggestion, *loc. cit.*, that the "Boxer" originally was placed near water, given the importance and persistent appearance of water in the Amykos story, is still more likely under the present circumstances. One may imagine the great figures standing beside water—as they do in Theokritos—probably not far from a palaestra.



## NOTE ON THE INTERPRETATION OF THE FICORONI CISTA

It is a curious fact that in the many attempts to interpret the Ficoroni cista<sup>1</sup> (fig. 13), its eminently classical and symmetrical frieze has been split up into units lacking the slightest artistic value. The most extreme example of this antiquarian approach to a work of art is the isolation of the five figures in or in front of the Argo into a little group utterly devoid of even the rudiments of composition.<sup>2</sup>

Yet, if one starts at the acknowledged center of the scene, the tree to which Polydeukes is tying Amykos, and moves an exactly equal distance to left and right, it is clear that one is confronted by a central group flanked by lateral units which together form one panoramic scene. Thus the central group is composed of the two contestants framed on either side by a standing and a seated figure. This balanced, closed composition is emphasized by the outer figures on either side of the group who stand with their backs toward the spectator. These figures seen from the rear are the first of three major vertical units which constitute the lateral groups on either side of the central scene. The fact that these lateral groups balance each other in general mass rather than in exact duplication of form, that is, that the introduction of the Argo modifies the strict symmetry of the right, enriches and varies this basic scheme without essentially altering it. So, too, each of the lateral groups is terminated in its upper corner by seated or reclining figures which form a curve facing away from the center.

One might describe this rich and varied composition at length. However, the preceding general analysis is sufficient to indicate that four-fifths of the frieze of the Ficoroni cista is occupied by one panoramic scene in which the major incident, the triumph over Amykos, is flanked by scenes alluding to the landing of the Argo (the action which evoked the main incident) and the use of the spring (the action attendant upon the main incident). The remaining fifth of the frieze is filled by a small, again, highly symmetrical scene serving as a kind of coda or epilogue to the large panorama. Here, a Silenus under a tree is flanked by two standing figures which, together with their accessories (the punching bag and the waterspout), form the usual balanced, closed composition. A valuable check on the probable correctness of this compositional analysis lies in the mathematical precision with which the frieze appears to have been assembled. The distance between the center of the tree and the right and left margins of the main scene, that is, up to the elbow of the punching figure on the right and to the spear of the drinking figure at the left, is identical. Similarly, the distance from the center of the tree to the crossed outer foot of the bearded hero standing to the right of the central group is precisely the same as that

<sup>1</sup> Rome, Villa Giulia, No. 24787 (K); della Seta, *Museo di Villa Giulia*, pp. 481 ff., Helbig-Amelung ii, 303 ff., No. 1752. A complete bibliography for the cista is not given in either of these references. However, by combining the references cited in these catalogues with the extensive older discussions quoted by Otto Jahn, *Die Ficoronische Cista*, Leipzig, 1852, and the later articles indicated by G. Q. Giglioli, *L'arte etrusca*, Milan, 1935, p. 52, and including the summary given by Inez Scott Ryberg, *An Archaeological Record of Rome (Studies and Documents xiii, Pt. I)*, Philadelphia, 1940, pp. 108-113, a fairly complete bibliography may be obtained.

<sup>2</sup> Carl Robert, *Archaeologische Hermeneutik*, Berlin, 1919, pp. 105-116.



to the solidly planted outer foot of the youth seen from the rear at the left (both of these figures serve as transitions between the central and lateral groups and, therefore, each appears to be in two groups). And, again, these distances are exactly the same as those from the foot of the bearded hero to the elbow of the punching youth on the right and from the foot of the youth with his back to us to the vertical spear on the left. In other words, the panoramic scene is made up of four exactly equal compositional parts, of which the two central parts unite to form the main group while the outer units constitute the flanks. And each of these four units is, again, exactly equal to the fifth unit, the little epilogue centered about the satyr. This clear division into equal parts which are then combined into a rhythmical, musical composition can hardly be accidental.

Furthermore, once the frieze of the Ficoroni cista is seen to be largely composed of one panoramic scene, its interpretation is infinitely simplified. Indeed, formal analysis and interpretation stimulate and reinforce each other to a remarkable degree. Although the majority of figures on the cista have been interpreted in the most diverse ways, there is general agreement about a few.<sup>3</sup> The protagonists, Polydeukes and Amykos, Nike, Athena, and the winged daimon recognized either as Boreas or, more correctly, Sosthenes,<sup>4</sup> are among this fortunate number. For the most part, the husky bearded figure seated to the left of Polydeukes and in front of the daimon has been accepted as Mygdon, Amykos' brother, and looked upon as a Bebrycian counterpart to the seated Hellenic spectator witnessing the contest from the opposite side. This identification seems reasonable, given the obvious balance of opposing elements in this central group and the additional marked similarity between Mygdon and Amykos. Apart from Polydeukes' little slave, all the other figures on the cista have been labelled with conflicting and controversial names. Yet, once one accepts the present compositional division, a new and very tempting approach to the seemingly hopeless task of disentangling these Argonauts presents itself.

Once the divine or barbarian figures in the main scene have been subtracted, that is, once Athena, Nike, Sosthenes, Amykos, Mygdon and, in addition, the little slave have been eliminated, there remain twelve figures. And according to Pindar,<sup>5</sup> it was precisely twelve heroes who set forth on the great adventure. In this case, the favorite classical number of twelve consists of the following heroes listed in the poet's order: Herakles, Kastor and Polydeukes, all three, sons of Zeus; Euphemos and Periklymenos, the sons of Poseidon; Orpheus, Apollo's son, Echion and Erytos, sons of Hermes; Zetes and Kalais, the Boreades. These ten came to accompany Jason, in addition to the seer, Mopsos. When we recall the quantities of heroes who accompanied Jason according to the Hellenistic and post-Hellenistic versions and the fact that the Ficoroni cista, as it is generally agreed, reflects a considerably earlier iconographic and artistic tradition than its late fourth- or early third-century date

<sup>3</sup> In this brief note, I shall not quote the various alternatives which have been suggested for each figure. They may be found in the bibliography quoted in note 1, and, especially, in Jahn, *op. cit.*

<sup>4</sup> First suggested by Panofka, *Preussische Akademie der Wissenschaften, Sitzungsberichte*, 1851, pp. 114 ff. According to Ioannes Malalas, *Chronikon* iv, p. 78, a bulky winged figure appeared to the Argonauts and prophesied their victory over Amykos. They called this local, Bebrycian daimon, Sosthenes. This theory was accepted by Jahn, Helbig-Amelung, etc. See, too, the brief article by E. Maass, "Boreas und Michael," *JOAI*, xiii, 1910, pp. 117-122.

<sup>5</sup> *Pythian Odes* iv, 301 ff.



implies,<sup>6</sup> this coincidence becomes of particular interest. The occurrence of a band of twelve Argonauts in these two instances suggests that the fourth *Pythian Ode* and the cista reflect a common tradition. If so, it is reasonable to suppose that one may be helpful in interpreting the other. Let us see.

The most easily identified of the Argonauts is, of course, Polydeukes shown in the unmistakable act of binding Amykos to a tree. The bearded figure standing to the right of Athena has frequently been called Herakles. Given the fact that he is the only bearded Argonaut on the cista, and that Herakles was already a mature and celebrated hero when he joined in the quest, this identification is probably correct. The youth seated beside him has most often been called Jason for no reason save that he occupies so important a position. If the entire frieze is split up into small units, as it customarily has been, there is no way of including the leader of the Argonauts in the main scene unless he is identified with this youth. Once it is recognized that we are looking at a large, panoramic scene, this problem ceases to exist. Furthermore, this laurel-crowned youth whose feet are protected by shoes and who is adorned by an armband in no way suggests the hardy hero. On the contrary, his appearance is well-suited to Orpheus whose rank among the Argonauts is attested by the fact that Apollonios Rhodios lists him as the very first of his far larger company.<sup>7</sup> Similarly, the dreamy youth seated in the upper left corner of the scene is not a mountain god, as his elevated position has induced many to think, but the seer Mopsos, from whose hand the priestly fillets flutter.<sup>8</sup> As for Jason, he is most likely to be recognized in the prominent figure to the left of the main group who leans on his raised left leg and wears a pointed cap or helmet. He is the only figure differentiated in this fashion, and the fact that he wears the familiar cap so often seen on Odysseus, again suggests his rôle as captain of the ship.<sup>9</sup> The last figure of Pindar's twelve whom we should expect to find without too much difficulty is Kastor. One other hero is particularly prominent on the cista—the stalwart figure seated on the Argo who watches the main scene so intently. Who else can this be but Kastor? The fact that like his twin brother Polydeukes, he has the now familiar downy beard on his face suggests that this identification is correct, especially since, as we shall see, both of the Dioskouroi are characterized by this beard in the little epilogue scene.

The remainder of Pindar's Argonauts, the sons of Poseidon, of Hermes, and of Boreas cannot be identified with any reasonable degree of certainty. Inasmuch as the Boreades are represented wingless and seated on the Argo in the well-known

<sup>6</sup> The dates most generally accepted for the cista. For discussion of the stylistic problems involved in the cista see, for example, F. Behn, *Die Ficoronische Cista*, Leipzig, 1907; E. Feihl, *Die Ficoronische Cista und Polygnot*, Tübingen, 1913, and the summary in Ryberg, *loc. cit.*

<sup>7</sup> *Argonautica* i, 23. For the earlier identifications of this figure, including a similar one as Orpheus, see Jahn, *op. cit.*, p. 10 f. Orpheus wears a crown of laurel on the famous krater in Berlin published by Furtwängler, 50. *Berliner Winckelmannsprogramm*, pl. 2. If the object in Orpheus' right hand were a spear, one would expect the lower part of the spearhead to be indicated below Nike's legs, given the height of this member on the other spears represented on the cista. Perhaps this is the golden  $\alpha\omicron\pi$  which characterizes Orpheus in Pindar, *Fragment* 139,9.

<sup>8</sup> Robert, *loc. cit.*, recognized that this figure could not be a mountain god. However, his suggestion that the taenia indicate that the youth is the "liebling" of one of the heroes is hardly more convincing!

<sup>9</sup> This figure has frequently been called Kastor. Jahn, *loc. cit.*, very wisely rejected this suggestion. For the iconography of the Dioskouroi, including the presence or absence of the pilos, see above note 32.



Talos vase,<sup>10</sup> one might be tempted to consider that the two youths on shipboard are the most likely candidates among the remaining unidentified figures for Zetes and Kalais. And given the importance of Euphemos, especially in Pindar's account, one might suggest that he is the hero represented on such close terms with Jason, and that his brother, Periklymenos, stands directly behind the leader. By this process of elimination, the two youths in front of the Argo, one coming down the ladder, the other seated on the shore, would be Echion and Erytos, the sons of Hermes. However, the individual identifications of these six figures are highly tentative, the main point being that the six remaining figures on the cista are in some way equivalent to the remainder of Pindar's heroes.

Whether or not the specific identifications suggested here prove acceptable, the basic analogy between Pindar's twelve Argonauts and the twelve heroes in the panoramic scene on the cista remains undeniable. It certainly offers a far more tangible and reasonable approach to the problem than the longer accounts of the journey. In any case, it affords striking confirmation of the correctness of dividing the cista's frieze into one long panoramic scene and a short tailpiece.

A word about this tailpiece. To the left, a young man punches the κώρυκος. This action, customary among Greek boxers practising for a contest,<sup>11</sup> can scarcely indicate any other Argonaut than Polydeukes. A comparison of the two figures of the hero shown on the cista emphasizes the correctness of this assumption, for they are identical, downy beard and all.<sup>12</sup> In fact, Valerius Flaccus must have been familiar with some such scene when he wrote:

"The hero of Sparta wears thongs of bull's hide studded with wounding lead, that to the empty airs at least he may deal his random blows, and that the Pagasean ship may watch the grandson of Oebalus filling the shore with his harmless sport."<sup>13</sup>

Polydeukes' counterpart in this symmetrical scene is certainly his brother Kastor with whom he so constantly appears. Kastor, too, has the required youthful beard and is further characterized by the spear and chlamys, his familiar attributes on innumerable monuments.<sup>14</sup>

The most amusing figure of this trio is the Silenus who gaily imitates Polydeukes at the expense of his own fat stomach. The appearance of such a figure in the context

<sup>10</sup> *FR.* pls. 38-39. The iconography of the Boreades is by no means uniform in this respect, witness the fact that according to Apollonios Rhodios, *Argonautica* i, 219 ff. they have wings on their feet alone while in Hyginus, *Fabulae* xlvii (ed. H.I. Rose, Leyden, N.D., pp. 17-18), both their heads and feet are winged. Robert, too (*op. cit.* p. 113), remarks that the Boreades are frequently represented without wings.

<sup>11</sup> According to Plato, *Laws* viii, 830 A. For the κώρυκος see Gardiner, *Athletics of the Ancient World*, p. 83.

<sup>12</sup> For a discussion of Polydeukes' downy beard see above, pp. 6 ff., and notes 36-40. It is interesting to note that Apollonios Rhodios divides the Argonauts into three groups. The oldest heroes, those of Herakles' age, are probably bearded. The next age group, represented by Jason, Cyzikos, and Polydeukes, is characterized by the youthful downy beard. Finally, there are the νέοι, the younger comrades who, as yet, have no beard. On the cista, too, the heroes are similarly classified according to the presence or absence or degree of their beards, and will be seen to fall into precisely the same three categories.

<sup>13</sup> *Argonautica* i, 420 ff. (translation quoted from J. H. Mozley in *The Loeb Classical Library*, 1934, p. 35).

<sup>14</sup> See Chapouthier, *Les Dioscures au service d'une déesse*, *passim*.



of the Argonauts is of particular interest given the fact that Sophokles wrote a satyr-play, *Amykos*.<sup>15</sup> Again, on a hydria in Paris<sup>16</sup> (fig. 14), the central scene of Polydeukes' triumph over the Bebrycian king appears in a setting of dancing satyrs and maenads. Under the circumstances, it is tempting to consider that both this scene on the cista and the longer panorama on the hydria in some way reflect theatrical productions.<sup>17</sup> One is left wondering to what extent—if any—the drama influenced the iconography of the main episode of the Amykos story.

NEW YORK CITY

PHYLLIS L. WILLIAMS

<sup>15</sup> Athenaeus, *Deipnosophistae* ix, 400 B. See Robert, *Die griechische Heldensage* iii, pp. 842 ff.

<sup>16</sup> Paris, Bibliothèque nationale: A. De Ridder, *Catalogue des vases peints de la Bibliothèque nationale*, Paris, 1902, pp. 334–6, No. 442. Present figure 14 taken from E. Gerhard, *AV*, iii, pls. CLIII–IV.

<sup>17</sup> Cf. Gerhard, *AV*, pp. 15–19 and L. Séchan, *Études sur la tragédie grecque dans ses rapports avec la céramique*, Paris, 1926, p. 40.



## THE IDENTITY OF THE RULER

By ONE of those coincidences which are not as rare as their outraged victims usually imagine, I chanced to solve the problem of the Boxer and the Ruler at about the same time and in the same sense as Miss Williams. While reading folklore material in quite another context, I happened upon a copy of Charles Leland's *Etruscan Roman Remains in Popular Tradition* and while rather idly staring at his drawing of a bronze mirror (fig. 1) which he had purchased in March, 1892 in an antiquary shop in Florence, suddenly realized that it supplied an unanswerable argument in favor of a certain already familiar identification of two bronze statues which had long occupied my attention. When Miss Williams proved to be thoroughly acquainted with the variant of this mirror-design which Gerhard had published in his corpus of Etruscan mirrors<sup>1</sup> and to have pursued its iconographic clues much farther, it was clear that my contribution could be only a brief note supplementary to her paper.

In printing it, I have a further acknowledgment to make. During a period of study in Rome in 1940 I learned from one of the younger members of the staff of the German Archaeological Institute that he was convinced that the Boxer and the Ruler were part of a group illustrative of the well-known idyl of Theocritus—again Miss Williams'

solution reached independently!—but that the Ruler was nevertheless a portrait of Lucullus, as I had suggested in an article in this JOURNAL in 1927: in short, the mythological element was allegorical, and the true significance of the group was the Roman victory over King Mithridates, who was symbolized by the defeated Bithynian king, Amykos the Boxer. At the time, the weakness in such a thesis seemed to be the impossibility of offering any formal proof that the two statues really belonged together (even though they had been found together, were stylistic contemporaries, and showed certain technical features in common), especially as a missing third statue had to be postulated. Accordingly, I dismissed the suggestion so thoroughly that I even forgot the identity of its proponent. Among the three scholars who might have advanced the idea, I hesitate to choose, and hence am in the



FIG. 1.—ETRUSCAN MIRROR ACQUIRED BY  
CHARLES G. LELAND

<sup>1</sup> Careful comparison of the two versions may awaken the suspicion that Mr. Leland acquired a copy made in rather recent times. In any case, it adds nothing to Miss Williams' argument.



embarrassing position of making full acknowledgment of priority of idea to a friend and colleague whose name I cannot give. When cultural relations are re-established, I trust that his identity will speedily come to light.

It is this allegorical interpretation of the recovered group of Amykos and the Dioskouroi with which the present paper is concerned.

With Amykos fixed as the mythological equivalent of Mithridates, the Dioskouroi can hardly represent anyone else than Sulla and Lucullus; but which is which? and who therefore is the Ruler? That the Ruler must be identical with Castor follows automatically from the observation that he is the onlooker and not the immediate adversary of Amykos the Boxer. But in that case the eventuality that Sulla had been Lucullus' superior officer in the First Mithridatic War, while it was really Lucullus (and not Sulla) who could claim to have "knocked out" Mithridates and who celebrated a belated triumph over him in the summer of 63 B.C., would force us to conclude that the Ruler, as Castor, must stand for Sulla. Castor seems to have had the prior rank and *major potestas* among the Twins, while it was, of course, Pollux who actually defeated King Amykos. The astonishingly powerful nude body of the Ruler is obviously heroic idealization; but the head is a "Late Republic" Roman portrait with distinctly individualized features; and I cannot imagine that the artist would have so closely followed the canons of mid-first century B.C. Roman portraiture unless he had intended a recognizable person. Hence if the Ruler is correctly identified as Castor, his head must bear a likeness (however heroic) to Sulla. Is this possible?

The article on the Ruler in vol. xxxi of this JOURNAL insisted that the head did not agree with Sulla's likeness in the only source in which we can be certain of it, the Late Republican coins minted by his grandson in 57 B.C., more than twenty years after Sulla's death. In a second study of the Ruler, appearing (under heavy obscuration by war-clouds) in vol. xviii of the *Memoirs of the American Academy in Rome*, this remark was repeated and the objection urged that "Sulla was over fifty years old when he returned to Rome after the Mithridatic War" and hence too old to be represented by the Ruler. This latter seemingly decisive objection disappears now that the Ruler proves also to be Castor, who might well supply the eternal youth (and the ephebic cheeks!) of a mythologic immortality; and the first objection will have to be reconsidered.

In discussing the portraits of Sulla on these coins (fig. 2),<sup>2</sup> Bernoulli pointed out that in them Sulla's head is noticeably flat on top, that it is high and narrow, with close hair, that there is a horizontal furrow through the middle of the forehead, the lower portion of which protrudes, and that the nose is lightly curved, set at a slight angle to the forehead and with recurved nostrils. Every one of these is a specific characteristic of the Ruler's head—and yet no obvious identity between the coins and the bronze leaps to the eye. Perhaps the coins are not of first-rate workmanship—Q. Pompeius Rufus on the reverse is not a sufficiently different looking person from Sulla on the obverse, and Sulla himself is not unmistakably identical on all three coins. Since the coins were struck after Sulla's death, their source is probably sculptural; and since the Ruler is more likely to have been part of an artistic com-

<sup>2</sup> Illustrated in Bernoulli, *Römische Ikonographie* i, Münztafel i, nos. 23-25.





FIG. 2.—HEAD OF THE RULER COMPARED WITH HEADS OF SULLA ON COINS STRUCK AT ROME IN 57 B.C.





FIG. 3.—HEAD OF THE RULER, FROM THE BRONZE STATUE IN THE NATIONAL MUSEUM, ROME



mission for Lucullus, it too was very probably made some time after Sulla's death. Miss Williams' brilliant combination of the monogram of MAR with the aedileship of C. Cl. Marcellus, presumptively in the late fifties, may well be brought into connection with the death of Lucullus just previously in 56 B.C., and possibly with the celebration of Sulla's memory by his grandson on coinage of the preceding year. So close a convergence of date in the coin portrait and the statuary group might be expected to have led to a similar convergence in the portrait type; but it is evident that the posthumous character of both memorials also furnishes a possible explanation for their diversity. If we will but imagine grey-blue eyeballs set in the constricted and overshadowed eye-sockets of the bronze head of the Ruler (fig. 3) in full-front view, they would surely produce a startling and most unusual effect comparable to that "gleam of his grey eyes, terribly sharp and powerful, rendered even more fearful by the complexion of his face," which Plutarch reported as characteristic of Sulla. Here, as in almost no other ancient head, we seem to see a quality of utter cruelty, of ruthless, cold-blooded and vindictive arrogance, such as belongs to Sulla beyond almost all other ancient Romans.

Thus, after having maintained for many years that the Ruler represents Lucullus, I am forced to grant the greater probability that he was in reality intended for Sulla. We can only hope that some toward fortune or greater professional acumen will bring the problem to its final solution. Until then, "*istud inter res nondum judicatas abeat, qualis Sulla fuerit.*"

BRYN MAWR COLLEGE

RHYS CARPENTER



1945  
July-September

ARCHAEOLOGICAL NEWS AND DISCUSSIONS  
NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS  
SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN  
CURRENT PUBLICATIONS

STEPHEN B. LUCE, *Editor-in-Charge*

Fogg Museum of Art, Harvard University, Cambridge, Mass.

NECROLOGY

**Alessandro Della Seta.**—The *New York Times* for May 26, 1945, reports from Italy the death of Alessandro della Seta in September 1944, at the age of sixty-five. Owing to his race (he was a Jew), he had been dismissed from his posts under the Italian Government, and was subject to arrest and detention in a concentration camp. Death occurred at Pavia while in hiding from his persecutors. He was born in Rome on June 29, 1879, and before the First World War had been Director of the Villa Giulia Museum. He is best known, however, as having been for many years the Director of the Italian School of Archaeology in Athens, under whose auspices he conducted a successful campaign of excavations on the Island of Lemnos. His most important book, *Religione ed Arte Figurata* (1912) was translated into English in 1914. Besides this book he is well known for many other professional books, articles, and reviews.

**O. M. Dalton.**—*Burl. Mag.* lxxxvi, 1945, p. 76, reports the death of this scholar, for many years Keeper of British and Mediaeval Antiquities of the British Museum, who died, in his seventy-ninth year, on February 2, 1945. He is best known for his *Byzantine Art and Archaeology* (1911), which was, for many years, the standard textbook in English on the subject, and for many of the publications in his Department of the British Museum. Born in 1866, he retired from the British Museum in 1927, when he gave up all his other professional connections, and till his death lived in retirement in the country.

**Albert Ten Eyck Olmstead.**—In the death of A. T. Olmstead (Chicago, April 11, 1945), America has lost its most distinguished historian of the ancient Near and Middle East. Born at Troy, N. Y., March 23, 1880, he had just entered his sixty-sixth year at the time of his death. Since he loved to teach, it is perhaps well for his happiness that he passed away just before retiring from active work at the University of Chicago, where he

had been Oriental Institute Professor of Oriental History since 1929.

Olmstead gained his interest in Oriental and historical studies mainly from his gifted teacher, Professor Nathaniel Schmidt of Cornell University, where he received his A.B., A.M. and Ph.D. (1902-06). Between 1904 and 1908 he had spent three years abroad, one each as Fellow at the American Schools in Jerusalem and Athens, another directing archaeological explorations in Asia Minor and Mesopotamia. For twenty-one years, until his appointment at Chicago, he taught ancient history and related subjects at several universities, especially at the University of Illinois, where he spent twelve years.

Olmstead was above all else a historian. For more than a generation he was one of the most faithful members of the American Historical Association, during a period when the interests of this society were concentrated on the political and institutional history of modern Europe and America. It is scarcely surprising that he failed to exert the influence which he should have, but it must not be forgotten that through his own patient efforts and those of his immediate colleagues and students he did much to draw American historians from the narrow parochialism into which they had drifted.

Two of Olmstead's early publications were well in advance of their time: his long adverse review of Ellsworth Huntington's *Palestine and its Transformation* (1912) and his critical analysis of the methods and procedures of the Assyrian annalists and chroniclers. It is a great pity that the burden of teaching with inadequate salary and an environment unfriendly to research during subsequent years made it difficult for him to continue along the lines so brilliantly marked out in these two studies. Conditions being what they were, he shifted increasingly to narrative and descriptive history, from which he did not branch out again until the early thirties—too late to make fundamental contributions. Happily he made a virtue of necessity, and in 1923 and 1931 he published



two massive volumes, *History of Assyria* and *History of Palestine and Syria*, in which he gathered all the significant facts which were available to him, following an objective method of presentation which saved his readers from the vagaries of many contemporaries. After 1931 he worked with extraordinary industry, accumulating and analyzing a vast mass of data bearing on the history of the Near East in Persian, Hellenistic, Roman and Byzantine times. In this undertaking, unhappily incomplete at the time of his death, Olmstead utilized the great resources of knowledge and information provided by the Oriental Institute; numerous articles show how he was able to digest and interpret these new materials, fitting them into a vast synthesis. Though not primarily an archaeologist, he did yeoman service in interpreting the results of archaeological research and in giving historical perspective to archaeologists. We shall continue to honor his memory. W. F. A.

Harriet Boyd Hawes died in Washington on March 31, 1945. With her has passed the last of the pioneer excavators of Minoan Crete. She was born in Boston on October 11th, 1871, the daughter of Alexander and Harriet Fay (Wheeler) Boyd. In 1892 she graduated from Smith College and a few years afterwards (in 1896) she went to Greece as a student of the American School of Classical Studies in Athens. There she began a memorable career of adventure and achievement. As a fellow of the School in 1898-1900 she carried on explorations in Crete and excavated the important Early Iron Age site of Kavousi. The following year she discovered the town of Gournia on the gulf of Mirabello in Eastern Greece, and excavated the site in 1901, 1903, and 1904, as the representative of the American Exploration Society in Philadelphia. The remarkable results of these excavations were published first in several articles and in 1908 in a book entitled *Gournia, Vasiliki, and other Prehistoric Sites on the Isthmus of Hierapetra, Crete* (including chapters by Blanche E. Williams, Richard B. Seager, and Edith H. Hall and colored plates from water colors by Adèle Moffat and Halvor Bagge). In 1906 she married the English anthropologist Charles Henry Hawes, and in 1909 they brought out together a small handbook, *Crete, the Forerunner of Greece*, which has long held its own as the best, most compact, and most readable survey of the subject.

The early years of her marriage were spent in Madison, Wisconsin (1907-1909), and in Dart-

mouth, College (1910-1917). In 1910 she received an honorary doctor's degree (L.H.D.) from Smith College. While her husband was assistant director and associate director of the Museum of Fine Arts, Boston, she was lecturer in pre-Christian art at Wellesley College (1920-1936). She had two children, Alexander Boyd and Mary Nesbit (Mrs. Colin Allsebrook).

Mrs. Hawes did not confine her activities to archaeology. Her interests and talents covered a wide range. She was a Red Cross nurse during the Turko-Grecian War in 1897 and during the Spanish American War in 1898. She conducted relief work among the Serbians, in Corfu, in 1915-1916, and organized and directed a Smith College Relief Unit in France in 1917. For her Red Cross work she received a decoration from Queen Olga of Greece. She wrote an excellent guide-book of Boston and won a prize for a mystery story. During the last years of her life she did active work for New Economics. While nursing her husband through a long illness she ran a small farm at Alexandria, Virginia. Only a few months ago she wrote an eloquent plea for the return of the Dodecanese to Greece, which was published by the American Friends of Greece.

Her loyalty to her friends and students, her keen sympathy for those whose cause she espoused, and her imaginative approach to problems made her an inspiring and dynamic personality.  
G. M. A. R.

David Randall-MacIver died in New York on April 30, 1945, at the age of seventy-one. His death removes from the archaeological world one of its most beloved and fascinating figures. MacIver was a very fine looking young man, and to the end of his life remained a striking figure. To this was added a smiling, sparkling charm of speech that gave a peculiar interest to everything that he said and served to kindle his own enthusiasm in others. He was also an unfailing optimist, and even in the fearful days of 1940 maintained a grim assurance that all would be well in the end.

Though born in London, he was very proud of his Highland origin. But he was a stranger to narrow nationalism, and spent many years in Italy and America. His family were among the founders of the Cunard Line, but his father died young, and his fondness for his stepfather led him to adopt the name of Randall-MacIver. He took his First in Literae Humaniores at Queen's College, Oxford in 1896, but he also found time to investigate the new-fangled subject of anthropology. His first



ambition was to go to Yucatan, but this did not materialize, and instead he went to Egypt.

From 1899 to 1901 he excavated at Abydos for the Egypt Exploration Fund, and from 1900 to 1906 he was Laycock Scholar in Egyptology at Worcester College, Oxford. From 1907 to 1911 he directed an archaeological expedition in Nubia for the University of Pennsylvania, and was also Curator of Egyptology at the University Museum in Philadelphia. His books relating to this work include *El Amrah and Abydos* (with A. C. Mace), *Areita, Karanòg, and Buhen*. Mr. Dows Dunham writes of him at this period: "His many excavations and his able and prompt publications have been invaluable, and Reisner, Steindorf, Emery and Kirwan, to mention only some of the major names of the last 35 years, owe much to the pioneering of Randall-MacIver."

In Egypt MacIver added measuring skulls to the other work of an excavator. In 1900 he wrote: "It might be supposed that the physical characteristics of a race were not less important in determining its origin and connections than the evidence of myth, language, custom, and aesthetic production, which is so freely and often so uncritically employed." This work in physical anthropology culminated in *Ancient Races of Thebaid*, written jointly with Sir Arthur Thompson, then Professor of Anatomy at Oxford. Another book, *Libyan Notes*, by Randall-MacIver and Anthony Wilkin contains the archaeological and anthropological results of a journey in Algeria to look for information about the ancient Libyans and their connections with Egypt.

In 1905 MacIver went to Rhodesia at the invitation of the British Association and the Rhodes Trustees to excavate at Zimbabwe and other sites. Much romantic nonsense had been talked about the immense antiquity of these ruins, but MacIver was able to demonstrate in *Mediaeval Rhodesia* that they dated from about 1200 to 1500 A.D.

In 1911 MacIver's career took another turn when he became librarian of the American Geographical Society, and he spent the next three years enlarging that collection. Also in 1911 he married Joanna Davidge of New York, and about the same time acquired the house on Eastern Point, Gloucester, Mass., where he spent many of his summers down to 1943.

On the outbreak of war in 1914 MacIver returned immediately to England. He became a captain on the Intelligence Staff and served on the Western Front and later in Macedonia.

After the war he settled in Rome, and this period was perhaps the most fruitful of his long and many-faceted career. Professor Doro Levi writes: "His admirable work on *The Villanovans and Early Etruscans*, which is perhaps his main achievement, still remains the basic source for any student of the subject, and is the clearest and most accurate résumé of all the facts. The importance of his contribution was recognized when he was called upon to open, with a communication on the subject, the First International Etruscan Congress in Florence in 1928." His other well-known books on Italy include *The Iron Age in Italy*, *The Etruscans, Italy before the Romans* and *Greek Cities in Italy and Sicily*.

In 1931 his wife died, and in 1936 MacIver married Mrs. George M. Tuttle of New York. They lived much in Florence but came to New York on the outbreak of the war. In the 1930's MacIver thought of studying the Copper Age in Spain, but was prevented by the Spanish Civil War. Instead, he became interested in the rich prehistoric cultures of Scandinavia, and from this moved on to the study of Old Norse. In 1942 he proudly announced to the writer that he could now read even legal texts with ease, but a couple of years later he said that he had read everything in the language and had given his Norse library to the University of Virginia. It was characteristic of him that, when he had finished with a subject, he gave the books to other scholars. About this time he was elected to the British Academy, an honor which greatly pleased him. He was also a very faithful member of the societies to which he belonged, and as lately as the spring of 1944 made the journey to Boston to preside at the dinner of the Fellows of the Society of Antiquaries of London resident in America.

He was distressed that he was unable to take as active a part in this war as in the last, but he found activities of a quieter kind to employ his wide experience. Among these was invaluable assistance to those charged by the War Department with listing Italian monuments to be protected from destruction. His last public appearance was in December 1942 at the meeting of the Archaeological Institute, when those present heard him speak on one of his favorite topics, "Who Were the Etruscans?"

HUGH HENCKEN

George Clapp Vaillant, Director of the University Museum in Philadelphia since 1941, died very suddenly at his home in Devon, Pa., on May 13, 1945, at the premature age of forty-four. Born



in Boston on April 5, 1901, he was graduated from Harvard College in the Class of 1922. In the following year he went to Tunis as a member of a commission sent by Harvard to report on the feasibility of conducting excavations at Carthage, and in 1923-1924 was attached to Dr. Reisner's expedition in Egypt. He returned to the United States in the autumn of 1924 as a Tutor in Anthropology at Harvard, and specialized in the American field, receiving his A.M. in 1925 and Ph.D. in 1927, both from Harvard. From that time till he went to Philadelphia, he was on the staff of the American Museum of Natural History in New York, spending much time in the field in Mexico and Central America. At different times during his connection with the American Museum, he held temporary appointments at Yale, New York University, and Columbia. During the First World War, he enlisted in the Marine Corps, but did not see service, as he was training for a commission at Harvard at the time of the Armistice; while in the present war, he served for many months in the Embassy of the United States at Lima as Cultural Relations Officer. At the time of his death, he was under orders to go to Spain on a mission for the Office of War Information. From 1942 till his death, he was Chairman of the Committee on Cultural Relations with Latin America. He was a member of many learned Societies in this and other countries, and held office in some of them. His bibliography includes a large number of the anthropological publications of the American Museum of Natural History, *Indian Arts in North America* (1939) and *The Aztecs of Mexico* (1941), together with numerous articles and book reviews. In 1930 he was married in the City of Mexico to Miss Suzannah Beck, who survives, with three children.

In his death, the Archaeological Institute of America loses a loyal and unselfish friend. He was one of the mainstays of our group of lecturers, giving his services freely and often at much personal inconvenience, and his lectures were always bright spots in the program of any Society fortunate enough to have him. Of late years he had been a very valuable member of our Board of Trustees and was a member of the Advisory Board of Editors of this JOURNAL. His was a nature brimming over with charm, sophisticated wit, geniality, and warmth of friendliness. Strikingly handsome, his eager, impulsive, yet unaffectedly dignified manner won him friends wherever he went, and his friendship, once given, was utterly

faithful and devoted. It was the good fortune of this writer to be associated with him on the Tunis commission in 1923, and the affection then formed between us was never allowed to lapse. S.B.L.

**George Ricker Berry.**—The death, on May 26, 1945, in Cambridge, Mass., in his eightieth year, of this eminent Biblical scholar and archaeologist, is announced in the press. A native of Maine, and a graduate of Colby College in 1885, he studied for the Baptist ministry at Newton Theological Seminary, graduating in 1889. In 1895 he received his Ph.D. degree from the University of Chicago, and taught there for a year thereafter. In 1896 he went to Colgate University and was connected with its Divinity School till 1928, when, upon its merger with that at Rochester, he removed to that city, becoming *emeritus* in 1934. In the later years of his life, he was much identified with the American School of Oriental Research at Jerusalem, was its Annual Professor in 1933-1934, and gave many lectures in this country under its auspices.

#### GENERAL AND MISCELLANEOUS

**Palaeolithic Collection, Barcelona.**—MARTÍN ALMAGRO BASCH devotes a chapter of his annual report on the activities of the Archaeological Museum at Barcelona to an account of the Palaeolithic remains (*Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 91-95; 2 figs.). Beginning with an account of the collection, he notes that the area covered by the activities of the Museum is poor in such objects, but that efforts have been successfully made to acquire, from other regions, a representative collection. As a result, the remains come from assorted provenances. There is a good group from some of the well-known French sites, such as that of the Somme. Many of the objects are gifts to the Museum, others secured by purchase or exchange. The main body of the article deals with the methods of installation used for its exhibition for the use of the public and for study purposes, and the cases, study trays, etc., especially devised for this purpose by the Museum authorities.

**Castromao Vase.**—The Archaeological Museum at Orense, in northwestern Spain, reports the gift to it of this vase in 1942. It was found in 1929 in excavations conducted at Castromao, near Celanova, by the Spanish archaeologist Florentino Lopez Alonso Cuevillas. His campaign yielded numerous other objects as well as this vase, which is a most important example of the culture of the "Castros" (pre-Roman). It is hand-



made, and reveals an entirely new form of decoration in the pottery of the northwest. The body is treated with vertical ribbing to the junction with the shoulder, where there are horizontal ribbings separating it from the neck, which is plain. In technique, and the state of the clay, it shows a resemblance to bucchero ware (JESÚS FERRO COUSELO, in *Memorias de los Museos Arqueológicos Provinciales* 1942, p. 157, pl. XLI, 2).

**Pre-Roman Bronzes.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 153–156, pls XLVI–XLVIII, ISIDRO ALBERT BERENGUER gives a list of pre-Roman and Hispano-Roman bronze objects in the Archaeological Museum at Murcia, of which he is Director. Forty-four out of a larger group of items are selected for description, and the greater number of these are illustrated in the plates. They include copper and bronze blades, spear-heads, arrow-heads, axe-heads, a piece that looks like a small pry or crowbar, fibulae, decorative bronze objects, a fine engraved bronze finial for a scabbard, a belt-buckle, and three ex-voto statuettes, one of which is masculine, the other two feminine. Most of these objects are in good preservation—in each case the present condition is given. Other objects in the Museum, not listed in this article, are mentioned at the end, such as more fibulae, rings, arrow-heads, etc.

**Province of Gerona, Spain.**—The following discoveries were made in 1942: Roman remains at San Martín Sapresa; an Iberian settlement in the region of Las Guillerías; and a neolithic cave in the territory of Las Garrotxas, further excavation of which is promised (JOSÉ ALVAREZ Y SÁENZ DE BURUAGA, in *Memorias de los Museos Arqueológicos Provinciales* 1942, p. 126).

**Seville: New Archaeological Museum.**—Announcement is made, by JOAQUÍN M.<sup>a</sup> DE NAVASCUÉS, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 160–181 (18 figs., pls. XLIX–LIV), that the Palacio del Renacimiento, in the Plaza de America, was ceded to the city in 1942 and has been converted into a Provincial Archaeological Museum. The objects of archaeological significance in the Museum of Art in the Merced convent have been transferred to this new home, and the Municipal Collections have been incorporated into the Provincial Museum. A description of the building is given. It was built to be the Palace of Art in the Ibero-American Exposition of 1929–1930, and its architecture is based on the Spanish Renaissance. Much space is devoted to the plans for arrangement of the col-

lections, which will ultimately include Prehistoric, Spanish pre-Roman, Greek, Graeco-Roman, Roman, Early Christian and Visigothic antiquities, together with Moorish, Mediaeval Christian, and modern objects. Four rooms have been installed. In the first, the leading pieces are a fine marble statue of Trajan, nude, with a cloak hanging on his left shoulder (illustrated), a bust of Hadrian, and the torso of a colossal statue, attributed to Hadrian, draped in a toga. There are also heads of Augustus and Trajan. The second room is devoted to showing the more important remains of a Roman building discovered in 1900 in Italica (modern Santiponce), together with a statue of Diana. The third room contains Graeco-Roman sculpture, of which the most noteworthy example is a large statue of Aphrodite, of the Syracusan type, discovered in Italica in 1940 (illustrated); there are also three good nude male torsos of Graeco-Roman work (two of them illustrated), while it is planned ultimately to install on the floor a fine Roman mosaic pavement. In the last hall to be described there is a statue of Mercury, a torso of Diana from Italica, a fine head of Apollo, and a beautiful stele. This room will also have a Roman mosaic let into the floor. The rest of the museum has not been arranged, but the remainder of the collections (especially rich in inscriptions) were being moved into their new home at the end of 1942:

*Ibid.* pp. 181–185, pls. LV–LVII, FERNANDO COLLANTES DE TERÁN, Director of the Municipal Archives, gives a brief description of the Municipal Archaeological Collection of Seville, that is to be incorporated in the new Provincial Museum. After giving the history of the collection, he lists some 1900 prehistoric objects, finds from tombs at Acebuchal (Alcores de Carmona) of pre-Roman type, a great amount of epigraphical material (Roman, Visigothic, Arab, Christian) of which the Roman funerary stelae are perhaps the most interesting, some Iberian sculpture, and a collection of pre-Columbian American objects.

**The Alhambra.**—In 1940, by decree of the State, a Museum was created in the Palace of Charles V, to be devoted to archaeology and art. This project was delayed by various conceptions, useful in themselves, but impossible to realize. In 1941 a new decree established the ownership of the archaeological collections of the Alhambra by the State, and the contents of the Museum of Art at Granada were transferred to the Palace of Charles V. A brief appreciation of the immense



importance of the Alhambra is given, together with a history of the formation and growth of the collections. As is to be expected, the bulk of the exhibits deal with Arab Art at Granada, especially with ceramics; but there are also many architectural objects, wood carvings, and a large collection of inscriptions. At the date of writing the opening of the museum to the public was expected to take place in the near future (JESÚS BERMÚDEZ PAREDA, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 47-53, pls. II-IV).

**Museo Balaguer.**—This museum, at Villanueva y Geltru, south of Barcelona, is fully described by MARIA DEL PILAR CORRALES Y GALLEGO, its Director, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 61-75 (1 fig., pls. I, VII-XIII). It was formed by the Catalan scholar Victor Balaguer (1824-1901) and presented to the city in 1900. In 1916 its maintenance was assumed by the State. It contains a valuable reference library, and the exhibits of the Museum include, besides Mediaeval and Renaissance paintings, sculpture, ceramics and the like, an important archaeological collection (Stone and Bronze Age objects, Punic, Iberian, Roman, and Egyptian antiquities, and specimens of American pre-Columbian culture). There is also an important numismatic cabinet, with coins from the Greek period to the present day, the Roman Consular and Imperial series being especially well represented. There is also a representative group of works of art of the Far East.

**Museum of Granada.**—JOAQUINA EGUARAS IBÁÑEZ reports on the construction work done in this Museum during 1942. The principal patio was paved with a typical early Granadine pattern of black and white stones, creating a mosaic of geometric design, of which an illustration is given. Among the acquisitions of the year was a collection of thirteen vases of the Arab period, all of which are in a good state of preservation, and nine of which are illustrated. Another important acquisition was a Mediaeval gold coin, in almost mint state (illustrated). Other purchases and gifts are listed (*Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 131-133, pls. XXXIII, XXXIV, XXXVII, 1).

**Manresa.**—Under the auspices of the Archaeological Museum of Barcelona, a museum was established in this city in 1941. It contains sections of Prehistoric, Iberian, and Roman archaeology, ceramic and numismatic collections, and Mediaeval and modern art. The Museum is still

in a period of organization, and only a few rooms were open to the public at the end of 1942. It will ultimately have its own separate administration (MARTÍN ALMAGRO BASCH, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 83-84, pl. XVI).

**Valladolid.**—SATURNINO RIVERA MANESCAU presents his report for the year 1942 as Director of the Archaeological Museum in Valladolid, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 210-213, pls. LXVII-LXVIII. Of particular interest is the excellent work of restoration of two sixteenth-century processional crosses, fine examples of Spanish Renaissance ecclesiastical craftsmanship. Among the acquisitions for the year are objects dating from Neolithic to Renaissance; of especial interest are a marble male head of Roman work and a bronze statuette of a horse with Ibero-Roman inscriptions incised on both sides of its surface.

## EGYPT

**Offerings for New Year.**—In *B.M.A.* n.s. iii, 1945, DOROTHY W. PHILLIPS calls attention to a number of Egyptian faience bottles in the Metropolitan Museum, inscribed with wishes for the New Year. The most handsome of them, presented to a priest named Amen-hotpe, is reproduced. The style is that of the Saïte period. All these bottles are lentoid in shape, with the text and decoration on the front, and a vertical band running around the circumference. The actual provenances of these bottles are in no case known, but it is conjectured that the priest Amen-hotpe lived in Thebes. The bottles doubtless contained perfume or some rare oil. A translation of the inscription is given.

## MESOPOTAMIA

**Sennacherib Reliefs.**—EDITH PORADA, in *B.M.A.* n.s., iii, 1945, pp. 152-160 (13 figs.), calls attention to the fact that the Metropolitan Museum has six fragments from the reliefs of the Palace of Sennacherib at Nineveh. She quotes the Biblical account of this king's unsuccessful siege of Jerusalem. The reliefs in the Metropolitan are published, and an attempt is made to fit them into the drawings made by Layard of the reliefs as he found them. The reliefs were not all in good condition, for many had been badly damaged when the city fell in 612 B.C., and the palace was destroyed by fire. The material used is alabaster. Each fragment in the Museum is published oppo-



site a similar drawing from Layard, so that we can be certain from just what rooms in the palace they came. The first shows a high official of the Assyrian court; the next two show cavalymen fording a stream; here the men face in a different direction from the Layard drawing, but they doubtless come from the same room. The devices employed for representing mountains and rivers in these reliefs are confirmed by a clay map (illustrated) where the same symbols appear. From the representation of Sennacherib's campaigns in the marshlands around the Persian Gulf the Metropolitan has a fragment showing an Assyrian soldier ferrying captives in a boat. Another fragment is from the siege of a city—a composition portrayed in two rooms of the palace. This fragment is identified with a part of one of Layard's drawings, and shows soldiers scaling a wall with ladders, while below, archers are directing a steady fire at the defenders. The last fragment shows prisoners of war being driven out of a captured city. All these reliefs exhibit an attempt at realism, and a stressing of detail. A comparison with the reliefs from Ashurnasirpal's throne-room is interesting and instructive.

#### PALESTINE

**Middle Bronze Age Tomb.**—Traces of an extensive Middle Bronze Age cemetery have been found at el-Jir in the Wadi Rubin, 14 kilometers south of Jaffa. A rock-cut tomb discovered in 1940, yielded pottery, jewellery, scarabs, an ostrich egg-shell, alabaster vases, bronze daggers, and a collection of flat ivory pieces 3.5 mm. thick. The ivories, which probably had adorned a casket, consist of one female and two male figurines, the latter wearing Egyptian kilts, lion- and horse-heads, cows and birds. The Egypto-Canaanite style suggests that they are a local product. The pottery dates the tomb to the late Hyksos period, seventeenth or sixteenth century B.C. (J. ORY in *QDAP*, xii, 1945, pp. 31-42).

**Israelite Conception of Immortality.**—This subject is discussed in the *Bibl. Archaeologist* iii, No. 1, Feb. 1945, by O. R. SELLERS. He emphasizes the absence of any unity of belief or of orderly development of thought on the subject among the Hebrews. The paucity and vagueness of the references to the hereafter in the Old Testament is striking, all the more so when compared with the numerous and elaborate references in Egyptian literature. G. E. Wright (p. 17 f.) suggests that the absence of any traces of food or

drink in the pots found in Palestinian tombs points to a less materialistic view of the after-life than that which prevailed in Egypt. May not the vagueness of the Israelite references to the hereafter be also due to a less magical, more sober approach to the whole subject? The Israelite was content to affirm his belief in a life beyond without indulging in futile and baseless speculation as to what the nature of that life might be.

#### GREECE

##### GENERAL AND MISCELLANEOUS

**Polybius.**—G. C. RICHARDS has an excellent article on this subject in *CJ*, xl, pp. 274-291, giving an account of the life of Polybius, and a sound appraisal of his value as an historian. It is of interest to archaeologists as containing a succinct historical and topographical sketch of the city of Megalopolis, his birthplace, and a résumé of the excavations conducted there by the British School at Athens in 1890-1891, in which the writer took part (see p. 275, footnote 5).

##### VASES

**Fikellura Amphora.**—T. L. S (HEAR) publishes, in *Record Mus. Hist. Art Princeton* iii, no. 2, 1944, pp. 5-7 (fig.) a Fikellura amphora, formerly in the Simkhovitch collection, recently purchased by Princeton University. It is carefully described, and is a typical example of this ware. The bulk of the article consists of an argument for assigning these vases to Rhodes, rather than the traditional attribution to Samos. It belongs in the third quarter of the sixth century B.C.

**François Vase.**—To the many discussions of this celebrated krater is now added one by GEORGE W. ELDERKIN in *Art in America* xxxiii, 1945, pp. 28-33 (pl.). He notes that on each side there are four friezes, the obverse dealing with Achilles, the reverse with Theseus. The third frieze from the top, showing the marriage of Peleus and Thetis, encircles the vase. An attempt is made to see in the Theseus episodes three tragic scenes and one comic, and thus to tie the vase in with the Athenian dramatic tradition of trilogy and satyr drama. The presence of Dionysos, both in the continuous marriage scene and in the representation of the Return of Hephaistos, suggests this, as well as the form of the vase, a krater for the mixing of wine. It is also pointed out that the subjects of the Return of Theseus from Crete, and the return of Hephaistos, both of which appear on the François Vase, also figured on mural



paintings in the temple of Dionysos Eleuthereus at Athens (Pausanias i, 17, 3).

**Green-Glazed Ware.**—CHRISTINE ALEXANDER publishes, in *BMAA* n.s. iii, 1945, pp. 133-136 (5 figs.), two ring-handled cups of this ware, one belonging to the Metropolitan Museum, the other from the collection of Mrs. William H. Moore, and on loan to the Museum. The Museum's cup, acquired in 1942, has relief designs of (A) a Maenad, and (B) a Satyr, each riding a sea-monster; the Moore cup has scenes of horsemen in combat. These two cups are believed to be the only two in America of this kind with scenic decoration; the regular custom is to employ vegetal designs. These vases were made in Syria, and belong in the period of Augustus, but their spirit is Hellenistic rather than Roman. A third vase, a yellow-glazed jug in the form of a filleted head with long curls, perhaps an effeminate Dionysos, but more probably a Maenad, is published in this article. It was likewise acquired by the Metropolitan in 1942, is also from Syria, and is of similar date. The article ends with "Notes on the Glazes" by MAUDE ROBINSON.

## ROME

### GENERAL AND MISCELLANEOUS

**Excavations of Barcelona Museum, 1942.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 85-90, pls. xvii-xviii, MARTÍN ALMAGRO BASCH gives a report on field work accomplished during the year 1942 under the auspices of the Barcelona Museum. It is divided into five headings.

1. In Ampurias the campaign lasted from December 15, 1941 to August 1, 1942. A large section of the Roman city wall was laid bare, the preserved height being about 5 m. The construction of this wall is described and a part of it is illustrated. It would appear that in the first or second century A.D. part of the wall was demolished, as it was no longer considered necessary for defense, and an amphitheater was erected. This amphitheater was excavated and cleared, and is considered a unique example. It is situated at the west side of the street leading to the principal gate; to the east are the remains of a rectangular building, probably a palaestra. At the north of the excavated area, a fine Roman villa was cleared. The completion of a local Museum was expected in 1943 (see *ibid.* pp. 82-83) when the bulk of the finds, now in Barcelona, will be transferred to the site.

2. In July, 1942, twenty dolmens at Alto-Ampurdán were opened, and proved to be very rich in pottery. In March some megalithic tombs in this same area, excavation of which had been begun in 1941, were completed, also yielding important ceramic evidence.

3. At Gerona a brief campaign resumed work begun before the war, with the object of clearing the Roman walls. The results were interesting. Below the mediaeval ruins of the castle of La Gironella, a square Roman tower was discovered. The Roman north gate was also found, which in the Middle Ages had been filled in with rubble.

4. At La Creueta an Iberian settlement, dated in the third century B.C. was excavated, yielding Greek sherds anterior to the site. A special article or monograph on this work is promised.

5. At Mallorca work was continued. The Museum of Barcelona is now the principal depository for finds from the Balearic Islands. The work in 1942 was for the most part in the Roman period. A volume on the archaeology of Mallorca is in preparation.

Finally, a list of publications undertaken by the Museum is given. During the year the third volume of *Ampurias* appeared, and the fourth was promised before the end of 1942. A list of its contents is given. Other publications are mentioned.

**"Scorched Earth" in Antiquity.**—In *CJ.* xl, pp. 298-299, WENDELL CLAUSEN notes the great similarity between the tactics used by Stalin in 1941 against the Germans, and those employed by Q. Fabius Maximus against Hannibal in 217 B.C., quoting Livy (xxii, 11. 4) to show that exactly the same orders were given to the civilian population. Like Stalin, Fabius counted heavily on the aid of winter to weaken the enemy.

**Roman Business Men.**—EVA MATTHEWS SANFORD has an interesting article in *Class. Outlook* xxii, pp. 33-35, on "Roman Business Men in the Provinces in the Days of the Republic." She points out that mercantilism had no place in Roman policy during the period of the establishment of Roman supremacy in the Mediterranean. Loot from captured cities, and the sale of captives, practiced by all ranks in the Roman armies, gave the Romans early a reputation for avarice. Exploitation of the provinces by officials and tax-collectors created hatred of Rome in the East, and helped Mithridates to induce the Asiatic Greeks to revolt. Cicero's actions against Verres and others show the extent of this exploitation. Under the Lex Claudia of 217 B.C., no senator was



allowed to own a ship large enough for commercial use, and most of the senators owed their income to farm operations. Even Cato the Elder, who wrote convincingly on the benefits of agriculture, found means, however, of evading the Claudian law, and, through a freedman agent, was interested in shipping enterprises, and also did business in slaves. Business as such, however, was in the hands of the knights, but until the end of the second century their operations were confined to Italy. In Cato's time and for some time thereafter, opportunities for gain in the provinces were in the hands of Greeks, or freedmen of Greek or Asiatic origin. It was due to this lack of mercantilism that piracy revived, not to be suppressed till Pompey's famous campaign of 67 B.C. The Greek freedmen who went to the East were looked down on as a "low class of adventurers," yet they performed many useful functions with a fair degree of honesty. Delos became a commercial center from the middle of the second century; many enterprising Graeco-Italians flocked there, and made themselves a vital factor in Aegean commercial activity, as is attested by numerous inscriptions; many became permanent residents. About 130 B.C. the great influx of Western business men into Anatolian cities began, when the kingdom of Pergamum became the Roman province of Asia. To the equestrian order at Rome was entrusted the collection of the grain-tithes, giving Roman capitalists for the first time a vital interest in the resources of the East. Similar business opportunities developed about the same time in Africa (Carthage) and Numidia, and mining contracts in Spain were pushed. Roman merchants penetrated all of Gaul south of Belgium, and many Roman business men settled permanently in Southern Gaul. This spread of business activity, combined with the conferring of full citizenship on the Italian allies in 88 B.C., caused a rapid rise of the capitalists in Roman politics, and gave the publicans a position of great influence and power. In the provinces usury at exorbitant rates was practiced. The greatest financial crisis, caused by Sulla's indemnity after the first Mithridatic War, left the Asiatic Greeks in the power of the money-lenders. In Cicero's time Rome was full of men looking for a quick turnover and high returns, and fabulous fortunes were made and lost. We know less about trade in the provinces than we do about the tax-collectors, but there was an increasing demand for Greek and Oriental products and luxury goods, paid for in many cases by the very profits

gained in money-lending and tax-collecting. Thus a stimulus to production was created, which may have been some compensation for official extortion. It was not until the Empire that a system of tribute, under a soundly established group of salaried officials, responsible only to the Emperor, was set in action.

**Barcelona.**—MARTÍN ALMAGRO BASCH submits his report for the year 1942, as Director of the Archaeological Museum in Barcelona, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 76-82, pls. XIV, XV. This museum, housed in the Palace of Graphic Arts of the International Exposition of 1929, had to undergo a number of drastic repairs during the year, which carried with them numerous changes of installation. The cataloguing of the collections was carried on with excellent results. In the field of reconstruction and restoration, the fine Roman mosaics of the Villa Fortunatus at Fraga (illustrated) were removed, under the auspices of the Museum, to be installed in the Museum at Saragossa. Among the few recent acquisitions there was purchased a fine Roman marble bust of an athlete, dating in the first century A.D.—*Ibid.* pp. 95-99, 1 fig., pls. XIX-XXI the same writer calls attention to the splendid collection of ancient glass in this Museum, all of which has been found in excavations conducted under its auspices. A few selected examples are illustrated, dating from the fourth century B.C. to the fourth century A.D.; but the collection includes several hundred specimens, the greater part of which has never been published. The bulk of the article deals with the method of installation of this collection. It is to be found in the southwest part of the Museum, which has been remodelled for the purpose, so that it can all be shown in a special room. It is hoped that this installation may serve as a model for other museums.

#### ARCHITECTURE

**Roman Theater, Tarragona.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 196-202, pls. LXI-LXV, SAMUEL VENTURA SOLSONA, Director of the Archaeological Museum, discusses the work done in clearing the site. It was discovered first in 1885, in a natural hollow of a hill near the city gate. Excavations in 1898 brought to light a fine fragmentary Imperial inscription, from an entrance lintel. But the first scientific work was done in 1919, and the results were published by Puig y Cadafalch in *Anuario del In-*



*stituto de Estudios Catalans* 1915-20, pp. 712-717, and elsewhere. Dimensions and other data are given. The bulk of the article deals with the objects from these excavations now in the Archaeological Museum at Tarragona, which were received in December 1922. They include two fine marble Imperial statues in armor, of which the heads are missing; two heads, slightly over life size, probably of members of the Julio-Claudian family, although one might be of Trajan; a headless bust of a male figure in a toga; a statue of a young Roman (head also lost) in a toga; a votive altar to Augustus; and a number of architectural members, such as cornice-blocks and Corinthian capitals. Further excavations took place in 1937, and a final note reveals the actual state of the theater at present, which, according to the writer, "practically does not exist."

#### SCULPTURE

**Roman Figurine.**—Princeton University has just purchased from the Simkhovitch collection, for the Classical department of its Museum of Historic Art, a figurine 0.15 m. high. It is published by F (RANCES) F (OLLIN) J (ONES) in *Record Mus. Hist. Art Princeton* iii, no. 2, 1944, pp. 7-9 (fig.). It represents a bald-headed hunchback, standing with legs apart, a mantle held about his body, covering him from shoulder to waist. Details were originally given in color, but most of this has disappeared. Princeton had already owned a number of heads of similar terracottas, but this is its only complete specimen. The method of manufacture is described at some length. These figurines were usually representations of characters in mimes (see Gisela M. A. Richter, in *AJA.* xvii, 1913, p. 149 f.). A date in the first century A.D. is assigned.

**Palencia.**—RAMÓN REVILLA, Director of the Archaeological Museum, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 158-159, pl. xli, 3, publishes, as a recent acquisition of his Museum, a bronze statuette of Hermes, of Roman style. The left arm and foot are missing, but the figure is otherwise intact and well preserved. No date is assigned.

**Roman Relief in Cordova.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 115-118, pl. xxx, SAMUEL DE LOS SANTOS GENEJ publishes a relief in Cordova, found at El Guijo, representing Demeter and Kore. Most of the monuments showing this subject in Spain are on sarcophagi, and the writer cites examples in the

museums of Barcelona and Tarragona, and in the church of St. Felix at Gerona. The cult of Ataecina Proserpina was common in Lusitania, as is evidenced by numerous inscriptions, but in Andalusia there is only one such instance. The relief represents an offering to Kore by a youth at the left of the scene. The goddess is seated facing him. This youth is interpreted as an initiate in the Eleusinian mysteries. Behind Kore is another female figure, standing, and recognizable as Demeter by the torch which she carries. A fourth figure, also female, may be Hecate. Originally, the relief was continued on the sides; on the right is part of a draped female figure, while on the left, the drapery preserved is that of a male figure. This involves the writer in a discussion of what is known of the Eleusinian mysteries, with some consideration of the representations of these subjects in ancient art. The conclusion is reached that the male figure may perhaps be Triptolemos or Hermes, the female another initiate. It is conjectured that this relief may be a part of the frieze of a temple dedicated to the Iberian Proserpine, and in Spain it must be remembered that Demeter and Kore were early assimilated with the Phoenician goddesses Tanit and Astarte. A date in the second century A.D. is suggested.

**Chalk Bust from Chichester.**—In *Record Mus. Hist. Art Princeton* iii, No. 2, 1944, pp. 9-19 (5 figs.), DORO LEVI publishes a chalk bust, recently acquired by the Museum of Historic Art of Princeton University, said to have been excavated in the garden of Wycombe House, Chichester. It represents a bearded man, draped in a toga, nearly life size. He wears a heavy beard, and his hair descends low over the forehead, and stops at the neck just below the ears. The technique is described in great detail. At first it was thought to be a mediaeval bust of a Christian saint, but this must be rejected, nor can it be an importation from Rome, as is proven by a geological analysis of the chalk by RICHARD M. FIELD at the end of the article, who demonstrates that it is English Channel chalk. It is therefore local work, and is of late antiquity. A comparison of this bust is made with the "few and inconspicuous products of Romano-British sculpture" to see if there are any parallelisms. It is shown that while local British art in the early Roman period had a very potent influence, this influence tends to diminish with the enforcement of Roman political rule and cultural trends. A chalk head of a warrior from Gloucester, and a head in high relief from Piltown, Sussex,



are mentioned, together with certain stone masks, as showing a blend between local traditions and Roman influence. Coming to the problem of fixing a date, it is established, by comparison with existing monuments elsewhere, that this bust fits technically in the period of Constantine, or immediately thereafter, i.e., in the end of the first half of the fourth century A.D. Certain heads from the frieze of the Arch of Constantine are illustrated to show a convincing comparison with the Chichester bust, both as to the structure of the head, and the treatment of beard and drapery. The influence of the art of Rome is direct and vigorous, and it is pointed out that for this period it is almost unique in Romano-British art.

#### POTTERY

Soria.—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 188–191, pl. LIX, CLARISA MILLÁN reports on the activities of the Museo Numantino in Soria in 1942. Among the acquisitions is a group of seventeen vases of Celto-Iberian and Roman types. Among the latter, as well as the usual *terra sigillata* ware, is a large bowl, no. 11 of the list, decorated with birds and floral designs in black on a red ground. It was discovered in 1940 in excavations in the Roman area near this city. "It is an exceptional piece, and belongs to the pictorial style of the Alto Douro."

#### ROMAN GAUL

Treves (Trier).—*ILN*, March 10, 1945, prints a pre-war photograph of the famous Porta Nigra, with the comment that it and the Roman palace are reported damaged by bombs and shells. The city was captured by General Patton's forces on March 1, 1945.

#### ROMAN BRITAIN

London.—*The New York Times* for April 13, 1945, reports the discovery of a remarkable deposit of Roman pottery. It was made when sinking shafts for the reinforcement of the basement of Western Union House on Great Winchester Street, not far from London Wall, and was fourteen feet below the basement floor, and twenty-four feet below street level. The discoveries cover the entire period of Roman occupation of Britain, the earliest being a rim of a vase of Belgic (pre-Roman) ware. Included in the deposit are two vases of La Graufesenque ware (ca. 70–90 A.D.) and a signed specimen from a third-century pottery of Treves. Other objects found include lamps,

incense-burners, a woman's hairpin in gold-bronze alloy, a part of an iron stylus, and a Saxon dagger-blade.

#### EARLY CHRISTIAN AND BYZANTINE

Man and Angel.—FRITS LUET, in *GBA*, xxv, 1944, pp. 321–346 (29 figs.), continues his study of this subject, begun in *ibid.* pp. 265–282 (summarized in this *JOURNAL* xlix, 1945, pp. 88–90). This part begins with the story of Tobit and his son Tobias and the angel, and the first illustration is from a twelfth-century German miniature. The angel here is represented dressed as a traveler, in conformity with the story, although other contemporary representations stress the angelic attributes. The North Italian painter Caroto, in depicting the story, left the wings off the angels (he has three with Tobias) but gave them a female appearance, while in his fresco of the marriage of Tobias, at Veronà, one angel only is shown who has wings. As time goes on, artists tend to exaggerate the importance of the angel at the expense of Tobias, who becomes a puny child. In an Appendix, a long list of Italian representations of this story is given, for which there was no room in the main body of the article. Rembrandt made many drawings of the subject, in each of which the angelic attributes are usually emphasized, though Tobias is correctly rendered as a young man. A series of sixteenth-century Flemish tapestries in Vienna, one of which is illustrated, gives the whole story of Tobit, Tobias and the angel, and gives the true standing of Tobit and his family, in contradistinction to the general rule among artists, who show the family as in humble circumstances. One of the best and most truthful illustrations is that of Jan Steen at Brunswick.

The next subject to be discussed is the expulsion of Adam and Eve from Paradise. The best representation is found in Masaccio's fresco in Florence, dated in 1425. A sixteenth-century Flemish tapestry, also in Florence, is illustrated as a splendid example of this subject, and reference is made to its treatment in the Palatine Chapel.

The story of Abraham receiving the three angels is next taken up at some length. The angels were identified by the early Church Fathers with the Trinity, and consequently artists were "easily tempted to turn the visitors into supernatural beings." Nevertheless, the oldest representation, at Santa Maria Maggiore in Rome, dating ca. 495, renders them as distinguished



men. In a mosaic of the sixth century at San Vitale in Ravenna, they are still shown without wings. So, too, Raphael, in the Logge of the Vatican, makes them wingless. Likewise, a sixteenth-century Catalan painter, Gasco, shows the angels as travellers, their divinity being expressed by haloes. The symbolism with the Trinity, however, was the more usual, especially in Russia (a characteristic icon, now in the Walters Art Gallery at Baltimore, is illustrated). In the Baroque period, the allusions to the Trinity died out, but the angels retained their majestic winged aspect.

After mentioning very briefly the stories of Manoah and Gideon, the author speaks of Jacob's Ladder. The very essence of this dream demands that the angels be wingless, as they would not need a ladder if they could fly. So the earliest representations do not give them wings, but already in the thirteenth century, a French miniature in the Morgan Library shows them winged.

The final Bible story to be discussed is that of the fate of Heliodorus, related in II *Maccabees*, which Pope Julius II commissioned Raphael to paint as symbolizing the expulsion of the French from Italy. This story was also illustrated by Michelangelo in one of the medallions of the Sistine ceiling, usually interpreted as the death of Uriah the Hittite. In neither case are the angels given wings. It was reserved for the nineteenth century French painter Delacroix, in his fresco at St. Sulpice, to make them soaring figures. The conclusion reached in Lugt's study is that "we have to admit the fact that the so-called heavenly creatures are essentially human. They are not the creatures of God, but of the human brain."

**East Christian Censer.**—KURT WEITZMANN publishes, in *Record Mus. Hist. Art Princeton* iii, No. 2, pp. 2-4 (5 figs.), a small bronze censer of East Christian type, recently acquired by Princeton University. It is decorated with five scenes from the New Testament, cast in high relief, with details incised after casting. The scenes chosen are the Annunciation, the Nativity, the Baptism of Christ, the Crucifixion, and the Women at the Sepulchre. Each scene is illustrated and briefly described. It is difficult to estimate how many of these censers exist, but over twenty are known, with similar scenes—the most on any censer is nine, the usual number five, as in this example. Other scenes shown on these examples are the

Visitation, the Annunciation to the Shepherds, the Adoration of the Magi, the Entry into Jerusalem, the Incredulity of Thomas, and the Ascension. No clue can be found as to the source of manufacture from the provenances of these objects, which cover a very wide area; but stylistically they resemble the contemporary art of Syria or Palestine. They date apparently not earlier than the sixth century, but may well be later than the seventh.

**Khirbat Mafjar.**—In *QDAP*, xii, 1945, pp. 1-19, R. W. HAMILTON continues his study of the stone sculptures of this eighth-century Umayyad palace. While it has been found impossible to reconstruct the ornamental scheme as a whole, the most important elements can be studied separately. From the façade comes a group of hexagonal medallions (pl. viii, c and e) which recall the medallions of Mshatta. The centers consist of a counter-sunk twelve-petalled rosette, surrounded by a radial arcade of twelve arches, beneath each of which is a floral or palmette design. The radial arcade motive appears again in the ornamentation of the archivolt of the main gateway (pl. iv, d). There the arcade rests on colonnettes the lower ends of which turn inwards to form ribs across the soffit of the arch. The radial arcade was familiar in the decorative art of Syria, Mesopotamia and Iran, but the idea of transmitting the ornament to the intrados of an arch seems to be original. Many stones from the gateway tower were adorned with two varieties of guilloche pattern in which the pattern of the whole is reproduced in the pattern of the part (pls. iii-iv a-c). One of the most original architectural features is a circular stone window 2.04 m. in diameter filled with a six-pointed star (pl. vii). From the octagonal kiosk in the forecourt come fragments of a bull and human figures in which the hair is represented as in Palmyrene reliefs (pl. x).

The employment of the old traditional motives—the acanthus, cornucopia, grapes, pomegranates, vine-leaves, guilloches and various forms of interlacing strapwork mark the art as in line with the earlier Christian tradition. But the abundant use of stucco, the employment of brick vaults, and the presence of such specifically Sasanian motives as half palmettes, lotus flowers, rows of beads between fillets, radial arcades and rows of six-petalled flowers show that the older Christian tradition has been stimulated by the importation of Mesopotamian craftsmen.



Ten fragmentary Greek texts, the work of Christian laborers on the palace, are discussed by M. SCHWABE *ibid.* pp. 20-30.

**Ivory Figure in Tarragona.**—The Early Christian Museum in Tarragona, through its Director, SAMUEL VENTURA SOLSONA, reports that a most remarkable ivory figure, acquired in many small fragments in 1941, has now been restored at the National Archaeological Museum, and that a special case has been constructed for its exhibition. Illustrations show the fragments as they were originally received, and the final restoration. It proves to be a small nude female figure, with movable arms attached at the shoulders. No date is assigned (*Memorias de los Museos Arqueológicos Provinciales* 1942, p. 204, pl. LXVI).

**Byzantine Coins.**—A small hoard of Byzantine gold coins, found near ancient Lagbe, in South Central Asia Minor, was described by the late E. T. NEWELL in a paper published posthumously in *NM.* 105. There were originally 102 gold solidi in the hoard, of which 97 reached the writer, and five are in the Museo delle Terme in Rome. They extend from the reign of Leo III, the Isaurian, 717, to that of Theophilus and Constantine, ca. 839, thus covering the interesting period of the iconoclast emperors. Few hoards have been found that can definitely be assigned to this period, consequently the hoard is of unusual interest.

### MEDIAEVAL

**The War and Mediaeval Art.**—In *College Art Journal* iv, pp. 75-80, CHARLES R. MOREY reports on damage done to mediaeval monuments by the war. As was natural at the time of writing (December, 1944), it is largely devoted to Italy, although mention is made of France and England. Museums, as a rule, were spared, but private collections, particularly of coins, were looted. The best stained glass of France had been taken down and stored, and is safe. Although the Cathedral at Benevento was destroyed, the famous bronze doors are for the most part safe—only 6 of the 72 panels are missing, while 30 others are badly damaged. Frescoes suffered; outstanding losses are at San Gimignano and Viterbo, and perhaps the outstanding calamity was the burning of the Campo Santo at Pisa. Even here, however, the east and west walls can be restored. The mosaics at Sicily, Rome and Ravenna are intact. "Pisa south of the Arno is a shambles," but the famous church of S. Maria della Spina is intact. Most of the other

famous mediaeval sites of Italy are safe. In France, Rouen suffered severely, as did Caen. In Tours, considerable damage was done to the Cathedral, and to the thirteenth-century church of St. Julien. The Cathedral of Chartres "came through practically unscathed." In England, with the exception of the Cathedrals of Exeter and Coventry, mediaeval monuments suffered little. "In the homelands of mediaeval art we can be thankful for the survival of its monuments to a degree that no one had any reason to expect or hope."

**Visigothic Antiquities at Granada.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 133-136 (3 figs., pls. XXXV-XXXVII), JOAQUINA EGUARAS IBÁÑEZ discusses some of the Visigothic objects in the Archaeological Museum at Granada. Many have already been published. The collection includes examples in stone and stucco, pottery, and objects of gold, copper and bronze. A list of provenances is given. Two stelae of local stone are especially important, and there is a very interesting group of column capitals, showing a debased Corinthian order. There is a large collection of pottery. A fine gold necklace of primitive Visigothic design is described and illustrated. Most interesting of all, however, and illustrated, not only by the plates but by drawings in the text, are three belt buckles or ornaments, one of iron, with gilded bronze inlay of running deer, one of copper with engraved designs, and one of bronze, with vegetal motives in high relief.

**Valladolid: Visigothic Antiquities.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 214-223 (6 figs.; pls. LXIX-LXXVI), GRATINIANO NIETO GALLO gives an account of the Visigothic collections in the Archaeological Museum at Valladolid. The finest piece is an altar support from Bamba, a monolithic pier of white marble 1.28 m. high by 0.25 m. wide, with a cavity at the top, perhaps to hold relics. It supported a marble horizontal top, which served as an altar table. It is decorated with crosses in low relief on the four sides of the shaft, while a member intended for a capital has a crude acanthus pattern. A comparison with similar monuments, notably one in Tunis, indicates strong Byzantine influence. Of lesser importance is a marble capital, found at Pollos in 1931, decorated with acanthus and volutes, very crudely executed.

The rest of the article deals with the finds from the necropolises at Piña de Escueva and Simancas.



Of these, the former was entirely of pottery, the richest and most varied deposit of Visigothic ceramics known. Seven types of vases were found, mostly pitchers and jugs, two-handled bottles, cooking pots, and bowls. All are illustrated in the plates, and section drawings are given of selected specimens. Where decoration exists, it consists of very crude incised geometric or zig-zag patterns. The pitchers often have a trefoil lip. In some examples, the clay is blackish, in others it is red.

The finds from Simancas were for the most part of metal objects. Particularly interesting are five daggers with iron blades and copper scabbards, decorated with geometric patterns. According to the writer, they are the archetype of a form of weapon still in use, and were a new invention in their time. They date early in the Visigothic period, as do all the objects from this site. Other metal objects were rings (one of jet), bracelets, pendants, belt-buckles of various forms, plaques, amulets, and the like, mostly of bronze or copper. In iron, besides the daggers, spearheads and various tools were found, which can only be called Visigothic from having been found in tombs indubitably of this type, so closely do they resemble examples of other cultures. Other finds were of slight importance—some few vases of *terra sigillata* or local ware, and some small glass vases. Four amulets are reserved for discussion at the end. They are of a type sometimes called "osculatoria," and consist of a ring to which is attached by a long stem some ornamental motive such as the head of a dove, a horse's head, and other motives (in Valladolid only the first two are found). The use of the dove suggests a Christian significance. All at Simancas were found in burials of women, and the conclusion is tentatively reached that they do have some unexplained religious purpose. The presence of *terra sigillata* in the Simancas necropolis would indicate that Roman influence was still strong.

**Mediaeval German Towns.**—Under the title, *The Morphology of the Mediaeval German Town*, ROBERT E. DICKINSON, in *Geog. Rev.* xxxv, 1945, pp. 74-97 (34 figs.), discusses the growth of urban life in Germany in the Middle Ages. German colonization throughout Europe may be said to have reached its peak by 1400, and had begun to wane. There were altogether some 3,000 towns, by far the greater number of less than 1,000 population (only 12 to 15 of over 10,000 inhabitants). Confined within their walls they retained their mediaeval character till after the

advent of the Industrial Age, which did not affect Germany till after 1870, so that most of the small towns still retain the essentials of their mediaeval ground plan. A special section is given to the basic systems of the urban ground plan. In brief, these systems are (a) Irregular, with a labyrinth of narrow streets; (b) Radial-Concentric (or Spider-Web) with a central market-place, from which streets extend to the walls and gates, and (c) Rectangular, which embraces all the consciously planned mediaeval towns. This system is dominant in Germany. The market is usually on a main route going through the town, but in more advanced planning is adjacent to the main route, so that through and local traffic are separated. In a few instances, the fully developed grid plan is attained, with a central square market-place. In West Germany in the eleventh century there were about 100 settlements of embryonic urban character, situated at outstanding points at the intersection of land and water routes, both in the Rhineland and the upper Danube. Each of these towns had a stronghold, or burgh, which was the fortified nucleus around which the settlement grew, and which often occupied the sites of preceding strongholds, Roman, Saxon, or Frankish. Outside the burgh, they grew without preconceived plan. In the Rhine and Danube lands, the bishoprics were established in or near Roman settlements (e.g. Regensburg, a plan of which is given, Cologne, or Worms). In other bishoprics, the market would be adjacent to the *castrum* where the bishop lived (e.g. Xanten, Trier and others); in other towns the built-up area was extended radially from the stronghold, and the main route was widened to form a street market with its own church (e.g. Muenster, Osnabrueck). In Westphalia and Saxony there are important contrasts in origin and development of urban settlements. In the former, the local market, rather than the mercantile community, contributed to the development of the town, and the ground plan centered in the church or market-place. A typical example is Höxter. Lower Saxony between the Weser and the Elbe was a frontier zone till ca.1200, and towns grew around a burgh or Imperial castle protecting the market settlements. This accounts for the frequency of the suffix—*burg*. Towns were frequently established adjacent to one another, and, at a later period, merged, as in the case of Braunschweig, which grew from seven such settlements. These towns are characterized by a single route



axis with a focal market-place. In Thuringia a typical example is Heiligenstadt. Others have a main route axis with several streets parallel to it, as in Hannover. In the thirteenth century, towns were planned as units, with the market-place in the center of a parallel-street layout, as in Blankenburg. With the exception of the towns on the Rhine itself, all the towns in Hesse and the lower Rhineland belong to the later Middle Ages, and about three-quarters of these towns were consciously planned. Goch and Kempen are good examples.

The towns of the South German lands are mainly founded market settlements of the later Middle Ages, grafted to earlier nuclei. Planned forms are the rule, and exhibit contrasts to those of North Germany. They are usually dominated by one through route, wider than any other street, on which the market is located, or else in a square adjacent to it. A number of characteristic South German towns are illustrated. In Bavaria and the Tyrol the castle town, as found in the north, is rare, as is the walled town.

Coming to the lands affected by German colonization, in the late Middle Ages we find planned settlements in every case, based on principles worked out in the motherland, or made a part, consciously planned, of towns already in existence. The layout had to be adjusted to the main route on which it was located, and the terrain. These lands are in the northeast and southeast, separated from each other by Bohemia and the western Carpathians. In the northeast, the important town is Lübeck, which is illustrated and described. First founded in 1143, it was added to in 1158, and further extensions grew in the walled area up to 1225. Other Baltic cities are largely based on the plan of Lübeck, owing to its being the head of the Hanseatic League. East of the Elbe the lands were occupied by military conquest between 1150 and 1250, and the towns were based on fortified stronghold centers, being exact counterparts of the early mediaeval settlements in the west. Examples are Meissen, Naumburg, and Eger in Bohemia. In the middle Elbe basin many towns have a small rectangular market-place. In Thuringia and Saxony, Weimar and Leipzig are examples of this. To the east of this area there extends a large zone, embracing Brandenburg, Pomerania, East and West Prussia, and Silesia. Almost all the towns in this area are thoroughly planned. Examples illustrated are Wittenberg, Soldin, Pilsen

in Bohemia, and Neidenburg. About the middle of the fourteenth century the capacity for town planning began to deteriorate and disappear. In the southeastern lands colonized the tendency was to follow the town planning of Bavaria. A concluding section summarizes the results of the investigation (for a sketch of the writer, see *ibid.*, p. 143).

**Cordova.**—SAMUEL DE LOS SANTOS GENER, Director of the Archaeological Museum, in his report for 1942, gives an account of some of the principal acquisitions during the year. By purchase, a fine mosaic of the fourth century A.D., discovered in the city, was obtained and installed. Most interesting, however, is a complete set of weights, quite unique of their kind, dating in the fifteenth or sixteenth century. A small group of Hispano-Arab ceramic objects, both pottery and architectural terracottas, was purchased, and a number of other examples of minor Arab art acquired by gift. A fine comprehensive collection of coins was also given to the Museum, including a number of interesting Roman specimens. The most important gift was that of a number of Arab well-heads of red clay, covered with green glaze and decorated with inscriptions and floral designs. These are illustrated, and belong in the Almoravid, or Murābī, period, i.e., early in the twelfth century (*Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 112-115, pls. XXVII-XXIX).

**Polychrome Madonna Statues.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 126-130, pls. XXXI-XXXII, JOSÉ ÁLVAREZ Y SÁENZ DE BURUAGA, Director of the Archaeological Museum at Gerona, publishes two statues of the Virgin and Child in that Museum. Both are of wood, and both are painted. In both the Virgin is seated and crowned. The earliest is dated in the second half of the twelfth century, and is said to have come from Aransá. The Holy Child is seated in his Mother's lap; his right hand is raised in the gesture of benediction, while in his left he holds the orb, representing the World. He wears a crown, like his Mother. The group is 0.51 m. high. The other statue is said to come from Alp in the Cerdaña, measures 0.80 m. in height, and its technique shows a definite advance over the earlier example. It is therefore dated in the first half of the thirteenth century. In this case the Infant Jesus sits on the Virgin's left knee. At the end of the article, reference is made to parallel examples existing in other parts of Spain.



**Twelfth- and Thirteenth-Century Theaters.**—Certain texts which indicate the existence of theater buildings in the Middle Ages are assembled by ROGER S. LOOMIS in *Speculum* XX, 1945, pp. 92-98, and commented upon by GUSTAVE COHEN. From these quotations, gathered together for the first time, Cohen infers that, so far as theatrical art is concerned the state of affairs in the thirteenth century was already about the same as in the fifteenth. Perhaps there was no permanent theater even in London, in the sense that the Swan Theater of Shakespeare's day was permanent, but there were some play-houses in the form of a circus, often in the ruins of a Roman amphitheater (as at Douai and Bourges). A part of the structure was reserved for spectators, another part for the "localities" and the actors sitting in front of them and waiting for the moment to appear before an applauding public. These men played in their "localities," as well as in the middle of the circus. They were recruited, especially in the acting of comedies and satirical plays, not only from amateurs, but also from professional mimes, survivors of the antique *mimi*, as one may perceive from the common identification of *mimi* and *joglars*. The discovery of these hitherto unknown or misunderstood texts makes necessary a revision of earlier theories and suggests a more thorough search through clerical Latin sources.

**Huesca.**—RICARDO DEL ARCO Y GARAY, Director of the Archaeological Museum at Huesca, has a short article on its collection of sculpture, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 139-141, pls. XXXVIII-XL. Barring a fragment of a bronze Roman statue, consisting of the right hand and forearm, the sculpture described and illustrated is Romanesque and Mediaeval. Of the former, there is a group of eleven capitals (two of which are illustrated) from the cloister of San Pedro el Viejo, with floral, animal, and human motives. This building was in existence as a Moorish shrine before the reconquest of the city, and immediately thereafter became a monastery. The cloister dates in the twelfth century. Other capitals in the collection come from the cloister of the Montearagón monastery, and from the Church of St. John of Jerusalem. These likewise are of the twelfth century. Of later date are a number of statues of saints, belonging in every century from the twelfth to the eighteenth. Two are selected for publication. The first, a statue of St. Bartholo-

mew, is of walnut; the saint is standing, and the drapery shows remains of polychrome decoration. It belongs in the end of the thirteenth century. The second is a stone, seated statue of St. Peter, also with remains of polychromy, and dating in the fourteenth century. Both of these statues came from the abbey church of San Pedro el Viejo, and are outstanding examples.

**Westphalian Crucifixion.**—In *B.M.M.A.*, n.s. iii, 1945, pp. 137-141 (2 figs.), MARGARETTA SALINGER publishes a small painting of the Crucifixion, recently acquired by the Metropolitan Museum. It is a piece of one of the wings of a large altarpiece in Bielefeld in Westphalia. The main panel is still in place in the Neustädter Marienkirche in Bielefeld, and is described and illustrated. The missing wings, originally consisting of eighteen small scenes, illustrating the story of the Redemption of Man from the Fall to the Last Judgment, were detached in 1840, and in 1854 were bought by the National Gallery in London, and set aside for resale. In 1857 they were auctioned at Christie's, to an art dealer, and were later widely dispersed. Within the last twelve years, eleven of the eighteen scenes have been identified, four of which have come to New York. This example is the Museum's earliest German painting. Although these Bielefeld paintings bear some resemblance to the work of "Meister Wilhelm" of Cologne, the style is more like that of the school of Westphalia. A date of 1400 is said to exist on the frame of the altarpiece, and there is nothing in this painting to deny its reliability.

## RENAISSANCE

**Renaissance and Baroque Art in Italy.**—The damage done to artistic monuments of these periods by the war is studied by RENSSELAER W. LEE, in *College Art Journal* iv, pp. 81-91. In the country between Cassino and Rome, Terracina, Gaeta, Velletri, Palestrina and Aquino have all suffered heavily, in respect to their palaces and churches. Further north, the province of Tuscany has sustained severe damage, but "we must be thankful that the most important monuments of Renaissance and even Baroque Art have, by and large, survived." Baroque has been the heavier sufferer. This is notably true in the campaigns of 1943 and early 1944. As examples, Palermo and Naples are cited, with lists of the principal churches destroyed or damaged, and Frascati, where most of the famous villas were hit, particu-



larly the Falconieri. Rome, of course, was spared, and in Apulia, Lecce is intact. Assisi and Perugia are all but unharmed, and in Florence, Arezzo, Siena and Cortona most of the most noteworthy monuments are preserved. Of the buildings damaged or destroyed, work of repair or restoration has been undertaken in many cases. North of Rome, Bernini's arsenal at Civitavecchia was destroyed, and at Viterbo the most severe damage of all was done, but in this latter case more to Mediaeval than to Renaissance monuments. The province of Umbria suffered relatively little, except at Foligno, Ancona and Loreto. In Tuscany, Pisa suffered most, but mention should be made of the damage to the Cathedral at Pienza, and, at Arezzo, the Casa Petrarca and the Museum. Pistoia suffered severely. Everyone knows the systematic destruction and looting perpetrated by the Germans in Florence. At Rimini the famous Tempio Malatestiano was severely injured. At the time of writing (December 1944) it was impossible to state exactly what had befallen Northern Italy, "but air reconnaissance has in some cases substantiated enemy reports that the damage has been severe." A list of monuments known to be lost in Genoa, Milan and Turin is given. Mantegna's frescoes in the Eremitani church at Padua are known to have been destroyed, "the most serious loss to Renaissance Art thus far in the entire war." That so much, however, is saved, is due in large measure to the care and watchfulness of the Italian authorities, and to the accuracy of our precision bombing (while the railway yards at Florence were put completely out of commission, the church of S. Maria Novella, close by, is intact). Attempts of the Germans to rob churches and deposits of works of art were in many cases defeated by the Italians with the help of Allied troops. In other cases, the deliberate theft by the Germans of paintings, especially from the Naples Museum, can be only too clearly established. In a postscript, the writer touches on what is known of damage to France. The public museums, as a rule, escaped, but private collections were ruthlessly dispersed and shipped to Germany. Renaissance buildings known to have been destroyed or damaged at Caen, Rouen and Tours are listed, and the famous chateaux of Amboise, Chenonceaux and Chinon have been partly demolished. Other losses have doubtless occurred, but the toll is not as heavy as it might have been.

**Pico della Mirandola.**—In *GBA.* xxvii, 1945, pp. 59-62 (3 figs.), E. TIETZE-CONRAT identifies a

drawing in the Bonnat Museum at Bayonne as a hitherto unknown portrait of this famous humanist. She shows its strong resemblance to the portrait in the Uffizi and to the mural by Cosimo Roselli in Sant' Ambrogio at Florence. It is listed in the Bayonne catalogue as "Anonymous Venetian, late fifteenth century," but it cannot be Venetian, and is more probably Milanese. It may possibly be identified with a portrait of Pico, known to have belonged to the Roman antiquarian Fulvio Orsini, and by him attributed to Leonardo. It is, however, not the work of Leonardo, but perhaps by Ludovico Moro's court painter, Ambrogio Predis.

**Botticelli and Cosmé Tura.**—ERWIN WALTER PALM contributes a note, under this title, to *GBA.* xxv, 1944, pp. 376-378 (2 figs.). He first discusses Botticelli's *Mars and Venus* in the National Gallery in London, where the god is nude, the goddess fully clothed, as perhaps derived from Lorenzo di Medici's song on this subject. He then takes up Tura's *Madonna with the Dead Christ* in the Museo Correr at Venice, and suggests that this composition, with Christ nude and the Madonna fully draped "reaches as far behind the sanctified forms of the Christian dogma as Botticelli's intuition of Venus intrudes behind the classical appearance of his quality."

**Badajoz.**—TOMÁS GÓMEZ INFANTE reports, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 54-60 (1 fig., pls. v, vi), the work of reconstruction and rehabilitation of the building called "La Galera," to which the Museum has been transferred from its former location. This building is an important example of sixteenth-century architecture. The approaches to it are being cleared of modern and poor construction, and the building is being properly restored. Work commenced in September 1942, and at the end of the year was nearing completion. A series of photographs shows the building before work started, and what had been accomplished at the time of writing, and a plan gives an exposition of what was contemplated. As a result of the transfer of the Museum to its new home, activities were suspended in 1942, but it was hoped to resume in 1943. A list of acquisitions in 1942 concludes the report.

**Palacio "Jeronimo Paez," Cordova.**—Announcement is made, by SAMUEL DE LOS SANTOS GENER, Director of the Archaeological Museum, in *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 108-109, pls. xxv, xxvi, that on



September 30, 1942, this fine sixteenth-century palace, the work of the celebrated architect Hernán Ruiz, was made over by the State to be the home of the Archaeological Museum, thereby assuring the preservation of this notable building with its magnificent portal (illustrated) and assuring the Museum ample space for its valuable collections, together with a suitable lecture hall. —*Ibid.*, pp. 120-121, JOSÉ DE LA TORRE Y DEL CERRO, archivist, provides a note on the history of the building. The initial work was begun in 1540 when the portal was built, and the building was ready for use in 1543. The tower was added in 1552, and the first patio dates from 1559.

**Burgos.**—In *Memorias de los Museos Arqueológicos Provinciales* 1942, pp. 100-103, pls. xxxii-xxxiv, MATÍAS MARTÍNEZ BURGOS describes work done during the year in the Archaeological Museum of Burgos, of which he is Director. He reports that during 1942 the sixteenth-century Casa de Miranda at Burgos has been turned over to the authorities of the Museum for care and preservation. Among the acquisitions illustrated are a sixteenth-century Dutch painting of the Descent from the Cross, with Christ in the arms of His Mother, and Mary Magdalene and St. John in attendance, a work of the school of Quentin Matsys, and two fine sixteenth-century statues of walnut, representing St. John and St. Mark, originally made for the local Dominican convent of St. Paul.

**Last Prince of Urbino.**—WILLIAM R. VALENTINER, in *GBA.* xxvii, 1945, pp. 27-38 (7 figs.), calls attention to two child portraits, formerly in the collection of the late Dan Fellows Platt, and now in Detroit. They are the work of Federigo Barocci (1526/28-1612) and represent the young Prince Federigo della Rovere of Urbino, and were painted in his infancy, in 1605 and 1606 respectively, when the artist was at the end of his career, and under the influence of the early Baroque era. Some account of Barocci's life is given, by what artists he was influenced, and his influence in turn on later artists, notably Rubens and Van Dyck. An account of the Dukes of Urbino, and especially of the child's father, Francesco Maria II, serves as an introduction to the main body of the article, which is devoted to the story of the life of the young prince. He was born in 1605, assumed the dukedom at the age of sixteen, in 1621, when his father abdicated in his favor, and died, from causes which cannot be determined, in 1623, at

the age of eighteen. Shortly after his accession to the ducal throne, he was married to Claudia, daughter of Grand Duke Ferdinand II Medici, by whom he had one daughter. His betrothal to this princess had taken place when he was four years old. After his death the Duchy of Urbino passed into the power of the Pope, under a secret compact between his father and the Vatican that in the absence of a male heir the Duchy should go to the Papacy. A full and interesting account is given of the life and character of the young Duke, who the writer believes has been much maligned by later historians.

## AMERICA

**Houses of Sierra Tarascans.**—*Publication no. 1* of the Institute of Social Anthropology of the Smithsonian Institution is devoted to a study of this subject by RALPH L. BEALS, PEDRO CARRASCO, and THOMAS McCORKLE, with a Preface by JULIAN H. STEWARD (x, 37 pp., 8 pls., 20 figs., 6 tables). The town of Cherán was chosen for special study. The houses are either of wood, adobe bricks, or stone. The essay may be sufficiently summarized by listing its sub-headings—Introduction (pp. 1-2), Theoretical Background (pp. 2-4), Scope of the Study (pp. 5-6), The Tarascan Town (pp. 6-7), The Town of Cherán (p. 7), Building Materials and their Sources (pp. 8-10), Types of Structures (pp. 10-20), Notes on Distribution of Types (p. 21), House Furnishings (pp. 21-24), Economics of the Tarascan House (pp. 24-28), Relation of Houses to Social and Economic Status (p. 28), Uses of the Tarascan House (pp. 28-30), Ceremonial and Social Functions (pp. 30-32), Relation to Environment (pp. 32-33), History (pp. 33-36) and Contemporary Housing Problems (pp. 36-37). Of particular importance to archaeologists is the section on History, for which Carrasco is responsible. It would appear that adobe houses were common about 1559, while stone and wood are also mentioned at that time, but not as often found. In an unpublished, undated manuscript in the National Museum at Mexico, illustrations are given of the types of houses then prevailing, showing that the modern houses do not correspond to those of the sixteenth century. The present methods of construction reveal Spanish influence. The pre-Hispanic houses were predominantly of adobe, with thatched, four-shed roofs. The Spaniards introduced tile roofs, and architectural modifications, and iron tools favored the use of



wood construction on a large scale. Recently adobe has come back into its own, owing to the scarcity of wood, and is the more favored building material.

**"Dolmen" on Martha's Vineyard.**—In *Bull. Mass. Archaeol. Soc.* vi, 1945, pp. 29–32 (3 figs.), FREDERICK JOHNSON describes, with the aid of a plan and two section drawings, excavations conducted in 1934 in an attempt to determine the origin, if possible, of a dolmen, long known to exist on the island of Martha's Vineyard, Massachusetts, not far from Gay Head, and near a small Indian shell-heap, which yielded fragments of refuse, but no artifacts. The excavation proved that from the south the dolmen was approached by a brick walk, the bricks being hand made; it was not on hard pan, but about half way between it and the present level. Other minor finds were discovered in the top soil around and inside the dolmen. Within the dolmen there was a layer of top soil about 20 cm. thick. No artifacts of any kind were found at hard pan level or below. There was a fire pit inside the dolmen, 24 cm. in diameter, and about 5 cm. deep, filled with charcoal, some of which had not carbonized. In this pit were found several hand-forged nails. Excavations conducted under the floor yielded no results. Evidence suggests that the stones of which it was built did not have to be brought from any great distance. The following conclusions are reached. It was undoubtedly built by human hands, but all finds that were made cannot be earlier than Colonial, or after 1600—probably a good deal after that date. The fire pit seems to have been used only once. No traces of pre-Colonial activity, in the form of artifacts of any kind, were found. It is highly improbable that it was built by Indians, as in that case artifacts would exist, and there is no record of any such construction by Indians elsewhere. An attribution to the Vikings is not devoid of possibility, if it can be positively established that they reached the island, a subject at present much debated. Furthermore, the building of megalithic monuments had ceased in Europe long before the Vikings discovered Vineland. The writer therefore believes that this "dolmen" was built by a colonial settler, with a yoke of oxen to haul stones, who wished to make a cold cellar for his farm, or some similar addition.

**La Tola, Ecuador.**—In *The Masterkey* xix, 1945, pp. 18–19, HERBERT SPENCER DICKEY describes a visit to this island in the Santiago River, near the Colombian border. The beach "is covered by literally tons of potsherds," and he

puts in a plea for scientific exploration, before the site is ruined by the operations of a gold mining company, which is opening the numerous burial mounds, known to be full of priceless gold objects, for commercial purposes. The company, which is of Italian origin, has recently been blacklisted.

**Moapa Paiute Winter Wickiup.**—FRANCES E. WATKINS gives, in *The Masterkey* xix, 1945, pp. 13–18 (3 figs.), an account of the last known of these habitations, which, in accordance with tribal customs, was destroyed on the death of its occupant. Previously none of these houses had ever been photographed or described, and "there will probably never be another." It was situated in the Moapa Valley of Nevada, and, as the Paiute tribe was hated and despised by the white emigrants, no interest was taken in their life or customs. The photographs and plan given in this article are the first to be published anywhere, although summer shelters have been illustrated. A full description of the methods of construction is given, as well as an account of the culture of the tribe. Some agriculture was practiced, but food was principally obtained from wild vegetation. Containers and utensils were in the main of basketry, but a coarse pottery was also manufactured for cooking. The distinctive tribal customs, beliefs and folk-lore have largely disappeared.

**Shell Game.**—FRANCES E. WATKINS points out, in *The Masterkey* xix, 1945, pp. 20–22 (2 figs.), that the shell and pea game, so familiar at County fairs and carnivals, was known and practiced by the Indians for generations and particularly by the Hopi. The Hopi form had its own characteristics, differing from other Indian versions. A Hopi set for this game has been for some time in the Southwest Museum. It consists of four carved cups, two cylindrical in form, two rectangular, a small ball or pebble, and a number of slender sticks or straws, used for counters. It was played among the Hopi primarily by women, but was also popular with boys and girls. The object was to guess under which cup the ball was hidden, and was played by two sides of any number desired. When one side hid the ball, the other side covered the eyes. When the correct position of the ball was guessed, it changed sides. The game lasted until one side had won all the counters. A game could thus last an entire day.

**Hopi Canteen.**—M. R. H(ARRINGTON) publishes, in *The Masterkey* xix, 1945, p. 31 (fig.), a pottery canteen recently acquired by the Southwest Museum. Its interest is due to its unusual



decoration of a human face, painted in grey with details in black, modelled in the round on one side of the bottle. It is a little over six inches high, was purchased in the Hopi country, and is of typical Hopi shape.

**Indian Pipes.**—In *The Masterkey* xix, 1945, pp. 23–24 (fig.), M. R. HARRINGTON reports the gift to the Southwest Museum of the pipe and pipe-bag owned by Sitting Bull, the famous Sioux chief, and which he took with him to Canada after the Custer massacre. He then sold it to Col. W. F. Cody ("Buffalo Bill") who gave it to the father of the donor. Both bag and pipe are typically Sioux, the head and bowl being of red catlinite. *Ibid.*, p. 30 (fig.) the same writer publishes a very rare pipe, obtained in Oklahoma, with the bowl in the form of an effigy. Although "of fairly recent vintage" it is reminiscent of prehistoric craftsmanship. It may be Southern Sioux, although the material (red catlinite) must have come from Minnesota.

#### FAR EAST

**Early Chinese Bronzes.**—In *GBA*, xxvii, 1945, pp. 5–14 (21 figs.), J. LEROY DAVIDSON examines a group of Chinese bronze vessels of the Shang (1726–1122 B.C.) and Early Chou (1122–950 B.C.) periods. These vessels are of the shapes called *Kuei*, *Kuang*, or *Yu*. All of them have on their handles, lips, or covers, the design of a bird whose head is in the mouth of an animal or other bird. The evolution of this motive is illustrated by a series of photographs and drawings of specimens in various museums and collections. The double bird motive is called by the writer the "marsupial" bird, as the issuing bird usually comes from the breast rather than from the mouth. Insects and even human beings are at times also represented in animal mouths. The significance and symbolism has yet to be determined, as there is no knowledge of the ritual of this period; even Confucius was ignorant of it, and probably never saw one of these early bronzes. The problem must be approached with extreme caution.

**Pagan.**—*ILN*, March 10, 1945, pp. 275–277, in celebrating the recapture and liberation, in February 1945, of this ancient capital of Burma by the British, devoted three pages to photographs and section drawings of some of the famous temples and pagodas, all of which escaped further injury. This is due to the care taken of them by the Burmese archaeologist U. La Pe Win. The ancient glory of this "city of pagodas" came to an

end in the Mongol invasion of the region in 1277, and its conquest not long thereafter. Of the original (estimated) 13,000 pagodas and monasteries, the remains of some 5,000 can still be traced, and 1,000 can actually be identified. Of these, the dates of construction of many are known.

**"Coromandel" Screen.**—In *BMFA*, xliii, 1945, pp. 4–9 (4 figs.), ROBERT PAUL DART publishes a Chinese screen acquired in 1943 by the Museum of Fine Arts in Boston. This type of lacquered screen is called "Coromandel," because the first ones to reach Europe were imported from China to the southeast coast of India, whence they were shipped to the West. They are also sometimes called "Bantam work" for similar reasons, Bantam on the north shore of Java being headquarters of the Dutch East India Company. This screen consists of twelve small panels with profuse designs of gardens and pastimes on both sides. The designs, and the technique of their execution, are carefully described, and the screen is dated, both on stylistic grounds and by inscriptions, in the late seventeenth century.

#### U.S.S.R.

A recent letter and several publications from A. N. BERNSHAM, director of the peoples' archaeological and ethnographical museum at Frunze, capital of the Kirghiz SSR, reveals some of the work done by Soviet archaeologists during the war. Many of the scholars working in the Academy of Sciences in Moscow and Leningrad moved to Kurort Borovoye in the Kazak SSR after the German invasion, and work was continued there. As a result of this transfer to Central Asia archaeological work in this area received more attention. A summary of archaeological excavations in Central Asia to the beginning of the war has been recently published.<sup>1</sup> The publications of Bernsham received are concerned mainly with the Bronze and Iron Ages, and later historical epochs. All were published in Frunze, except where noted otherwise: *Istoricheskoe Proshloe Kirgizskogo Naroda*, 1942; *Kultura Drevnego Kirghizistana*, 1942; *Arkheologicheskii Ocherk Severnoi Kirgizii*, 1943; *Pamiatniki Stariny Talasskoi Doliny*, 1943; *Istoriko-kulturnoe Proshloe Severnoi Kirgizii po Materialam Bolshogo Chuiskogo Kanala*, 1942; *Kenkolskaia Mogila*, Leningrad, Ermitazh Ekspeditsia 1942.

<sup>1</sup> V. I. Avdiev, "Istoriko-Arkheologicheskoe Izuchenie Srednei Azii," in *Dvadtsat piat Let Istoricheskoi Nauki v SSSR*, Moskva, 1942.



## BOOK REVIEWS

LA CAVERNE D'ISTURITZ EN PAYS BASQUE, by Emmanuel Passemard. Pp. 95, pls. 64, text-figs., 63. Tome IX of *Préhistoire*. Presses Universitaires de France, Paris, 1944.

Passemard began his excavations of the cavern of Isturitz in 1912. By 1935 he had published about a score of articles on the subject. His introduction to the present quarto volume is dated 1942. That the work came off the press in May, 1944 (a year before Germany's surrender to the Allies), is a tribute to French interest in prehistory.

The cavern of Isturitz is situated some 12 kilometers south of Hasparren (Basses-Pyrénées). The cavern is composed of a north gallery and a south gallery, with a combined surface of 2,500 square meters. The deposits are fairly thick, which helps to throw light on the time required to complete the excavation. Both France and Spain are rich in remarkable prehistoric sites with the Pays Basque as a connecting link between the two. Passemard's work gives a clear picture of the culture sequence as well as of the sequence in fossil animal remains. The culture levels, beginning with the oldest, are as follows: Upper Mousterian 2, Aurignacian 3, Solutrean 2, and Azilian 1. Isturitz is rich, not only in the variety of its implements of stone, bone, reindeer horn and occasionally ivory, but also in objects of art both mural and portable. Mural art is represented by bas-reliefs of cervidae; portable art by figures in the round, bas-reliefs and engravings. The illustrations of this volume are many and excellent.

As Director of the American School of Prehistoric Research, it was my good fortune to be able to include Isturitz as one of the sites to be visited by our students of the 1925 summer term. Passemard himself was there to guide us through the cavern and to show us a large collection from Isturitz, which ranks among the important prehistoric stations anywhere in France or Spain.

OLD LYME, CONN. GEORGE GRANT MACCURDY

LES DÉCOUVERTES DE RAS SHAMRA (UGARIT) ET L'ANCIEN TESTAMENT. 2e édition revue et augmentée, by René Dussaud. Pp. 214, figs. 38. Paul Geuthner, Paris, 1941. 100 fr.

It is a welcome ray out of the darkness that has so long enveloped *la belle France* to receive, however belatedly, this volume from the hands of the distinguished authority on Ras Shamra, M. Dussaud. Only the first edition, which appeared in 1937, is noticed in the bibliography of J. H. Patton's admirable study in a similar line, *Canaanite Parallels to the Book of Psalms* (The Johns Hopkins Press, 1944). Its successor is a considerable expansion, enlarged to 214 pages, with an increase of illustrations, including a map, from 23 to 38. The chief extensive enlargement of text is in the chapter treating the correspondences with the Old Testament.

The first six chapters give a succinct survey of the archaeological results from the finds at Ugarit. There may be noticed Chap. 2 with its discussion of the successive strata of the ancient site, dating from the neolithic period to the 12th century B.C.; Chap. 3 on the city of Ugarit and its temples; Chap. 4 on the Phoenician art and its relations, Egyptian and Ionian, supported by a notable list of illustrations of the objects concerned. Chap. 5 treats of the language, the Canaanite Hebrew, as the author holds. Chap. 6 discusses the primitive home of the Phoenicians, in which by reason of Ugaritic personal and geographical references the scholar argues for the origin of the Phoenicians from the region to the south of Palestine, so connecting them with the history of the Hebrew tradition. Chap. 7 presents the Phoenician pantheon as exhibited in the Ugaritic and subsequent sources. There should be noted the genealogical table of the gods, based on Philo of Byblos, along with his identifications with the Hellenic deities (p. 113). Chap. 8 is a discussion of the Phoenician myths coming from Ugarit; samples of the original text in transcription and translation are conveniently presented. Chap. 9 discusses the interrelation of these texts with the Hebrew Scriptures; an index of citations from the latter volume on which light is thrown by the Ugaritic numbers about 150 cases. The "Conclusion" sums up the author's results bearing on the Hebrew religion and its background. He finds a common civilization, material and spiritual, from Palestine all the way to Ras Shamra. He denies here the negative and arbitrary judgments of much Biblical criticism, for instance



claiming the early literary deposit of the Hebrew traditions, and presents the brilliant light thrown by Ugarit on the Canaanite-Israelite civilization and its religious phases.

The volume is fully annotated with bibliographical references, and the several indexes are done with great care and exactness. The book will indeed be of use—not only to Semitists and Biblical scholars, but also to archaeologists at large in its presentation of the arts and manners and especially of the high style of literature that had developed on the eastern shores of the Mediterranean by the middle of the second millennium B.C.

JAMES A. MONTGOMERY

UNIVERSITY OF PENNSYLVANIA

THE WESTMINSTER HISTORICAL ATLAS TO THE BIBLE, edited by *George Ernest Wright* and *Floyd Vivian Filson*, with an introductory article by *William Foxwell Albright*. Pp. 114, figs. in text 77, pls. XVIII. Index to the Maps at the back. The Westminster Press, Philadelphia, 1945. \$3.50.

The *Atlas* prepared by Professors Wright and Filson is much more than the authors claim for it. It has the peculiar merit that it presents historical geography in the light of a thoroughgoing and entirely competent application of archaeological information. Indeed the book embodies a brief history of the ancient world in both its political and cultural aspects from about 2000 B.C. to 325 A.D., with attention not only to the Hebrews and the early Christians, but also to the various peoples and civilizations which influenced them. The whole is thoroughly anchored in geography, since each chapter is a discussion of a full-page plate carrying a map or series of maps. Eleven plates take the story from the patriarchs to the Roman destruction of Jerusalem, and four cover the beginnings of Christianity down to 325 A.D. One presents the physical geography of Palestine, one the history of Jerusalem, and one the "Excavated Sites of Modern Palestine."

On questions of biblical criticism, the book may be described as moderately conservative, without reactionary tendencies. The authors avoid dogmatism, are fully in touch with the latest discussions, and have condensed a vast amount of specialized knowledge into a remarkably small space, with excellent judgment and in simple, non-technical, but accurate language.

Since the popular and pedagogical purpose of the volume allowed almost no documentation or

discussion of moot points, it may be worth while to call attention to certain problems, some of which the authors themselves do not regard as settled. One of these, the date of the Israelite capture of Jericho, involves nice problems of archaeological method. As Wright points out (pp. 39b, 40), there are different evaluations of the archaeological evidence and an apparent discrepancy between that for Joshua's capture of Jericho and that for his progress through Transjordan and his campaigns in southern Palestine. The discrepancy has various sources: (1) the three chief experts in ceramic chronology, Garstang, Albright, and Vincent, differ in their conclusions from the archaeological evidence, Garstang dating the fall of Jericho between 1400 and 1385, Albright between 1375 and 1300, Vincent at  $\pm 1250$ . (2) On ceramic evidence, Albright places the destruction of Bethel, Lachish, and Debir (Kiryath Sepher), all supposedly taken by Joshua, in the thirteenth century. (3) The reason for placing Joshua's entrance into Canaan late in the thirteenth century is found also in Glueck's conclusion, based on evidence secured by purely surface exploration, that there were no settled kingdoms east of the Dead Sea to oppose the Israelites (as the biblical accounts seem to imply) until sometime in the thirteenth century. Wright, therefore, detaches Joshua from Jericho.

However, objections to this conclusion are numerous. (1) Ceramic evidence, and especially that from surface exploration, is still subject to reappraisal, and cannot as yet determine dates within 75 or 100 years, as the differences of opinion noted above emphatically proclaim. (2) Even if Glueck's conclusions are correct as to the date of the founding of Edom, Moab, and Ammon as settled kingdoms, modern analogies suggest that, at an earlier date, these tribes, though still nomadic, may have been strong enough to dispute the transit of the Israelites through their grazing lands. The city names in the biblical accounts, which were written down at least 300 years later, can well be anachronistic, as is the local color in the stories of the Sojourn in Egypt. Similarly Wright's argument that the Amarna tablets describe a different situation from that which the Book of Joshua presupposes loses force, because of the latter's later date. (3) Judged on the evidence of archaeology, of the Pentateuch, and of the Book of Judges, the invasions of western Palestine by nomadic tribes which later became part of Israel took place at various times, beginning in the age of the Patriarchs or



earlier, but were combined and fused in the Book of Joshua into one story. They must be disentangled and rearranged to suit the evidence. (4) Many scholars find good reasons to leave Joshua as the hero of Jericho and to ascribe the conquest of southern Palestine to a small group which escaped from bondage in Egypt and came up directly from the south into Palestine. (5) In any case, it is perfectly clear that the chief Israelite invasions, which may have covered five hundred years, ended in the thirteenth century, some time before Merenptah's famous stele mentions Israel as living in Palestine, and that the land, then sadly reduced in prosperity by two centuries of turmoil, only gradually recovered some of the prosperity of Middle Bronze II and Late Bronze I.

The number of outstanding, unsettled problems in Hebrew history is emphasized by occasional statements in the text. A single page (57) raises two major issues. Apparently discussing central Palestine, the authors place the population at its greatest, in Roman times, between 1,500,000 and 2,000,000, and state that now, under the British mandate, it has again reached about the same figure. Possibly they were thinking of all western Palestine. In contradiction of this statement, and still less probable, is the theory (p. 38a) that the figures which would place the number of Israelites who wandered in the Wilderness at two or three million (Number 1 and 26) are actually those of David's census (*II Samuel*, 24). If one may judge by the possibilities of production under modern, intensive cultivation, western Palestine could never have supported more than a million and a half. Of these a large proportion lived in the plains, which were not occupied by the Hebrews. The 600,000 males of the *Book of Numbers* probably exceed the total Hebrew population under David.

A question of a different kind is raised on the same page by the denial of a geographical-historical distinction to which George Adam Smith gave currency. He argued that the differences between the northern and southern kingdoms were due to geographical differences. Wright and Filson deny this on the ground that there is no well-marked geographic boundary between the two sections of the central mountain range. But the "fat valleys" of Samaria, which run from Jezreel to a little south of Shiloh and from the Maritime Plain to the Jordan Valley, are worlds apart from the stony uplands of Judea, the rough and barren "wilderness," and the parched Negeb. The "persistent division of central Palestine cannot be ex-

plained by geographical factors" (p. 58a) *alone*, but these factors surely played a large part in it.

The New Testament and Early Christian section of the book might easily have been expanded by fuller discussion of the archaeology of such cities as Antioch, Sardis, Ephesus, and Rome. More attention to economic geography in the Graeco-Roman world would have been welcome. But where so much has been given, it is ungrateful to ask for more. New Testament Palestine is adequately described within the determined limits. The point is properly emphasized that it is impossible to plot numerous journeys of Jesus. The problems of Paul's journeys are affairs of literary criticism, to which, as yet, archaeology can make little contribution. Professor Filson mentions such problems with reserve. In mapping and recounting Paul's movements preference is given to the *Book of Acts*, a secondary source, over the primary source, Paul's letters. Alternative routes for Paul's "second" and "third" missionary journeys might have included north Galatia (pp. 88a, 94b, pl. xv), and alternative dates for the procuratorship of Festus might have been given (pp. 76b, 80a), i.e. beginning 56-58 A.D.

Questions may be raised regarding certain matters of detail. The trade routes across Galilee (pl. xiv) almost certainly missed unimportant Nazareth by a few miles. Characteristic Roman remains prove that New Testament Jericho (pl. ix) lay on both sides of Wadi Kelt west by south, not northwest of Erithā. Hermon is not snow-capped in midsummer (p. 76, figure 55). The "waters of Megiddo" are not the only sources of the Kishon (p. 44a). The town sites along the western edge of the "wilderness" of central Palestine are two to six miles east of the watershed, not on it (p. 58b), but near the fault lines west of the Jordan gorge. It seems misleading to speak of the "desert area of the Nabatean kingdom" (p. 83a). Much of it was cultivated, much of the remainder steppe rather than desert. The theaters of Gerasa are Roman (i.e. half circles), rather than Greek (p. 84b). It is hard to believe that there ever was an Emmaus at el-Qubeibeh (p. 86b). On Jesus' last journey to Jerusalem (p. 86a) he went down the west side of the Jordan Valley and crossed to Perea (*Mark* 10, 1) at what is now called Jisr ed-Damieh (near Adamah; pl. ix, H-4). There is another possible site for Tarichaeae, not at Magdala (p. 56b), but between Magdala and Tiberias.

Filson's conclusion that the site of the Church of the Holy Sepulchre was inside the walls in



Jesus' day is probably correct. As he argues (p. 99b), strategic reasons invalidate the theory that the hill of Calvary lay just outside the wall. But the dotted line marked "Second North Wall?" (pls. xvii B, C) is without archaeological evidence or sufficient strategic justification. The present north wall of the Old City has been proved to mark the north wall of Hadrian's Aelia Capitolina. Some Herodian masonry, found at the Damascus Gate apparently *in situ*, suggests that Herod's "second wall" ran in part along the same line.

To offset the debatable statements just mentioned the book contains numerous corrections of hoary errors. The sites of Emmaus, Capernaum, Bethsaida Julias, and Gergesa are indicated according to recent archaeological findings. Probably that of Cana is rightly placed on the northern edge of the Plain of Asochis, rather than at Kefr Kenna near Nazareth (p. 86a). The puzzling geography of the fourth Gospel is cautiously handled (p. 85b, 86a).

The basic map of Palestine, drawn by Dr. George Barrois of Princeton Theological Seminary, attractive and useful as it is, illustrates the difficulty of representing relief on a flat surface. For the thorough student the delineation of zones of altitude and the indication of heights in figures are also necessary. The blue lines on Dr. Barrois' maps to indicate perennial streams may err on the side of optimism, for example at Jericho, but they are a decided step in advance.

The *Atlas* is by far the best available, and it will not soon be surpassed. Its corrections of ancient errors are numerous. W. F. Albright's introductory discussion of the purposes and methods of archaeology and the final chapter by Wright on "Excavations in Modern Palestine" are authoritative and illuminating. An excellent series of halftones with informative legends, scattered throughout the book, gives life to maps and text. Both publishers and authors are to be congratulated. The work will not only be extremely helpful and enlightening to the non-technical student of the Bible and early Christianity, but most useful also to the professional historian and geographer.

PACIFIC SCHOOL OF RELIGION C. C. McCOWN

THE SWEDISH EXCAVATIONS AT ASEIA IN ARCADIA, by Erik J. Holmberg. Pp. xv+192, figs. 154, pls. 6 (3 colored). (Skrifter utgivna av Svenska Institutet i Rom. xl.) C. W. K. Gleerup, Lund, 1944.

The conscientiousness and industry exhibited

by Holmberg in the publication of the preliminary report of his excavations at Asea has again been displayed in the commendable rapidity with which this final report has appeared. Although the three seasons of excavation during the summers of 1936 to 1938 were followed by only one summer of study in 1939, the author has very rightly felt it more important to present his material quickly than to achieve a degree of perfection that could be attained only by further study of the material some time after the end of the European war. The few cases in which he has mentioned that details are lacking pending further study certainly would not have justified the delay.

The site of Asea has long been identified through descriptions by ancient authors and the remains of the ancient fortification walls, some of which have always been visible, attracted early travellers. The walls about the plateau were traced during the excavations and the two spur walls descending into the plain to protect the lower town were also followed for considerable distances. The Hellenistic settlement was investigated in three areas on the plateau and by some trenches in the lower settlement. The central area, ca. 20 x 60 m., running almost across the plateau in an East-West direction, yielded all the prehistoric remains. Nowhere on the plateau was the fill very deep and the one section published, pl. iv, shows 2 m. of prehistoric accumulation, which seem to be average. The average depths of the strata were: pure Neolithic, 0.30-0.40 m.; mixed Neolithic-Early Helladic, 0.60-0.90 m.; pure Early Helladic, 0.20-0.40 m.; Middle Helladic, 0.50-1.00 m. Such shallow strata are typical of the prehistoric sites of the Peloponnesos, which are so often situated on rocky plateaus and therefore erode easily. The distinguishing of sub-periods under such conditions is often difficult, if not impossible.

The architectural remains of Neolithic Asea comprise one piece of wall and one fireplace framed with stone; many other fireplaces are indicated by ash deposits. There are several walls of the Early Helladic period and two houses are sufficiently well preserved to give an idea of their plan; they are rectangular and have one or two rooms. Evidence of several building periods would indicate a relatively long Early Helladic period. Seven Middle Helladic houses have clearly defined plans and illustrate a new building type. All are rectangular except House N, which has a quarter-circle back end and which belongs to the last Middle Helladic phase of the settlement. There is also a curved



wall section belonging to the earliest phase of Middle Helladic.

The tombs, except for one cist grave in both the Late Helladic and the Protogeometric periods, belong to the Middle Helladic period. There are 29 of this early period: 4 cist graves, 22 earth cut graves, 2 pithos burials and 1 burial in a stone enclosure.

The pottery forms the largest and most important group of prehistoric remains. It comes from four layers: pure Neolithic, mixed Neolithic-Early Helladic, pure Early Helladic and Middle Helladic. The discussion of the pottery, especially of the Neolithic ware, is an enlargement of the Preliminary Report and there are few changes. It is unfortunate that while the author feels that it would be an "infringement of the unity of the various groups" to make a separate classification of the incised pottery, he still persists in doing just that by separating the plain and patterned varieties of several Neolithic wares, though he weakens to the extent of admitting that they might have been treated together (p. 33).

In the group of Burnished Monochrome Ware, the A 1 or Fine Red Ware, so well known farther North, is rare at Asea. A 2, or Variegated Ware, is identical with that from Corinth; whence Holmberg believes it to have been imported. The black variety of this ware, A 3—Fine Black Ware, is known from only some ten sherds. The Fine Gray Ware, A 4, offers a few interesting new features not observed elsewhere. The low ring base, fig. 31 f, did not occur at Corinth; the high pedestalled bowl so common at Corinth, is almost unknown here. Incised decoration, which was characteristic at Corinth, occurs on only one fragment at Asea, but from Asea there are two sherds with painted decoration which are unparalleled elsewhere. I agree that there is little affinity with the Thessalian "Grey on grey ware", but Holmberg's statement (p. 48) that plain gray ware is not found in Thessaly must now be modified, for among the Thessalian sherds in the Ashmolean Museum I have recently seen a few fragments which I feel sure are this gray ware rather than the Thessalian variety. Nor is Holmberg completely correct in saying that the gray ware of Corinth is later than that of Thessaly and belongs to the end of the Neolithic period. On the contrary, though gray ware is found at Corinth together with typical Late Neolithic wares and even with Early Helladic ware,<sup>1</sup> it

occurs in abundance with Neolithic Urfinis ware,<sup>2</sup> which is not found at all in the mixed Late Neolithic-Early Helladic deposit at Corinth<sup>3</sup> and which I now consider Middle Neolithic and the Peloponnesian equivalent of, and contemporary with, Thessaly A wares.<sup>4</sup> The Peloponnesian gray ware would then be in part contemporary with Thessalian gray ware.

The coarse burnished ware, A 5, is important both in quantity, which is greater than all the rest of the Neolithic pottery combined, and in the variety of shapes represented. The tall bell-shaped base shown in fig. 37 q appears to be of the "fruit-stand" type, one of the few examples found here of a shape characteristic of the last phase of the Neolithic period farther North. In this class at Asea, and in other types of Neolithic pottery also, there is a greater prevalence of string-suspension holes in various types of lugs and bases than is usual in Mainland Greece, except perhaps at Athens.<sup>5</sup> As Holmberg says (p. 43, n. 2), there are affinities with Chios as well.

The last class of burnished monochrome wares is A 6, the Black Carboniferous Ware, of which only a few sherds were found. They are the well-known "Danubian" black ware widely distributed in Greece.

Group B, the glazed monochrome or Neolithic Urfinis ware, has as its first subdivision, plain ware. The class is richly represented here; most of the pottery is similar to that already known from other sites. Again, the long lug with a string-hole, fig. 40 d, is unusual. A special type of this ware is class B 2, inside incised ware, a coarser type of Urfinis ware, the interior of which is deeply furrowed with a blunt tool. The incisions usually form simple geometric patterns.

The painted varieties of the various wares already described are classed together as Group C. Patterned Ware. C 1 is the coarse burnished patterned ware, which in fabric is identical with A 5. Of the gray patterned ware, C 2, there are only two sherds, which I have mentioned while discussing Class A 4. C 3 is a variety of the black carboniferous ware, A 6, which was decorated after

<sup>2</sup> *Hesperia* vi, 1937, p. 503 f. Some gray sherds from Asea belong to this class of inside incised ware and Holmberg says, on p. 46: "This clearly shows the contemporaneity of the Neolithic gray ware with the common Urfinis ware."

<sup>3</sup> *AJA.* xliii, 1939, p. 599.

<sup>4</sup> *AJA.* xlvi, 1942, p. 121.

<sup>5</sup> See *Hesperia* vii, 1938, pp. 336 f., figs. 16-17.

<sup>1</sup> *AJA.* xliii, 1939, p. 599.



firing with designs in thick yellowish-white color; of this class, too, there are only a couple of sherds. The largest and most important class of patterned ware is the glazed patterned ware, C 4, which in fabric is identical with the plain glazed ware, B 1. Unusual local features are the vertically pierced lug at the carination of one bowl, fig. 53 c, and fragments of what seem to have been spouted jugs, fig. 53 e. Class C is thus seen to be not in any way homogeneous, the only connection between the four wares included being the patterned decoration. On the other hand, each of the four subgroups is closely related by fabric to one of the other wares, from which it is widely and illogically separated under this system of classification.

The Early Helladic culture seems to have impinged on the site of Asea when it had already developed to its second phase, for the yellow polished ware and the glazed ware characteristic of Early Helladic II are present from the start, though not in great quantity at first. Thus there is no true Early Helladic I here, nor have we seen any of the matt-painted pottery, the three-colored ware, the variety of black carboniferous wares, the gray "fruitstands," etc., which in other places to the North are characteristic of the last phase of the Neolithic period and are often found mixed with Early Helladic I wares. So a whole section of the material culture of prehistoric Greece is missing, or only very scantily represented, here and the mixture that occurs is between earlier Neolithic elements and later Early Helladic remains.

The Early Helladic pottery is presented according to Blegen's classification and most of the ware does not differ from the great quantity of Early Helladic pottery already known. I do not agree with Holmberg's suggestion that Early Helladic glazed ware is probably derived from Neolithic glazed ware. On the one hand, the fact that the two are found together at Asea is not typical, as I have just indicated above, but rather a result of provincial lag. Early Helladic glazed ware was fully developed before it first appeared at Asea, where Neolithic Urfirnis still existed, but evidence from more central sites does not prove that Neolithic Urfirnis ware was in existence generally when Early Helladic glazed ware appeared on Mainland Greece. At Corinth the very opposite seems to be the case.<sup>6</sup> On the other hand, the Early Helladic glazed ware is part of a cultural complex that includes the sauceboat, certain metal weapons and ornaments, cist graves and other features, all

<sup>6</sup> *AJA.* xliii, 1939, p. 599.

of which came together from the Greek islands. The intentional variation in the color of the glaze on Early Helladic ware also bespeaks a connection with Cretan Vasiliki ware. I do not know whence the Cretans derived their glaze, but as yet I know of no direct connection with the Neolithic Urfirnis ware. Incised coarse ware and a large amount of the so-called Cycladic pottery, particularly of the "frying-pan" type, complete the repertory of Early Helladic wares.

The Middle Helladic stratum, separated from that below by a thick layer of ash, produced a large quantity and variety of pottery, all of it hand-made. It belongs to the phases commonly known as Middle Helladic I and II; the settlement ends at the point of transition from Middle Helladic II to III, when the site seems to have been abandoned. Here black Minyan is the most common Middle Helladic pottery, while gray Minyan is comparatively rare. Yellow Minyan, which became popular only in the later phase, occurs next in quantity to black Minyan. After this comes incised ware, perhaps the only real connection with the Early Helladic period, with which there is otherwise a complete break. Matt-painted ware does not occur in the earliest pure Middle Helladic layer, but appears in the next one and becomes more usual in the second phase of the period.

Holmberg believes that black Minyan, so common at Asea, had its origin in the South Peloponnese rather than in its eastern part. There is great variety as well as quantity at Asea and among the unusual forms is a pegged ledge handle, fig. 94 b. Pegged handles occur as well in the matt-painted ware, fig. 98 d, which may have been imported from Aegina or may be the work of itinerant Aeginetan potters.

The long period between the end of Middle Helladic II and the Hellenistic period is represented by a small number of sherds of all three phases of the Late Helladic period and one whole Late Helladic III askos, by one Protogeometric bowl and by a Geometric bowl.

The twenty-four groups of miscellaneous objects of the prehistoric period which are next discussed afford an interesting illumination of domestic life in those early times. Especially noteworthy are the clay lamp of rather advanced type, from a pure Early Helladic level; a Neolithic spoon of clay; a few figurines of clay; some simple clay seals; a stone dagger from the pure Neolithic level and a fine group of bone utensils. Loomweights and whorls are inextricably mixed up in the de-



scription and in the illustrations and it is not clear which the author intends to be one or the other. There are bored celts from the top of the pure Early Helladic level. Great numbers of obsidian cores show that this material was worked locally after having been imported from Melos.

The Hellenistic town of Asea was probably founded in the middle or latter part of the third century B.C. It remained important as a fortress until the Roman occupation and then ceased to exist. The town wall consists of a circuit about the plateau and spur walls which enveloped the lower town to the South and East of the hill. Within the upper circuit, at the highest point, there was a large building which may have been a temple; everywhere else the plateau was covered with buildings of domestic type, and the plans of three houses, all of the same general type, could be reconstructed in some measure. Most important and best preserved of these is House I in the northeast part of the plateau, a house of the "megaron" type, known best from Priene. It is the first mainland example of the "pastas" type of house rather than the "prostas" type, well known from Olynthos. In and about the buildings were found quantities of pottery, lamps and coins of the usual Hellenistic types.

The Conclusions, a summary of the excavation report and an evaluation of the role of Asea in the Greek prehistoric world as well as in the late Hellenistic period, are somewhat marred by a long refutation of Valmin's theories as expounded in his report on Malthi, which would have been better suited to a review of the Malthi report. Asea is considered by its excavator as a part of the pre-Dimini Thessalian culture, that is, Thessaly I. The Danubian elements that appear at the end of Thessaly I are also present here in a weak manifestation, but the Dimini culture itself is completely lacking. In fact, I have already shown that all that is contemporary with Thessaly II in Central Greece and the Northern Peloponnesos, the Late Neolithic-Early Helladic I transitional phase, is also absent here and that an extension of what Holmberg would call an offshoot of Thessaly I culture continues until Early Helladic II culture mixes with it and finally becomes completely predominant. I cannot agree with Holmberg in calling the Asea Neolithic culture Thessalian if that implies a direct derivation of the culture from Thessaly, for I believe that both Thessaly I and the Asea culture are derived from the first Neolithic culture of Greece, which had its roots in the

region about the eastern end of the Corinthian Gulf. Also, contrary to Holmberg's statement (p. 179 and n. 1), I believe this earliest culture was seaborne and kept contact by sea throughout the Neolithic period.

The last two phases of the Early Helladic period are well represented at Asea, but here, too, there are obvious signs of provincialism and Early Helladic apparently lived on after the Middle Helladic culture was already established in the Argolid. There are abundant remains of Middle Helladic I and II, but the settlement was apparently abandoned at about the transition to Middle Helladic III.

The large quantity of prehistoric material found here is of great importance, not so much because it is new or different, but rather because it is the first material of its kind presented from Arcadia and so extends our knowledge of Greek prehistory to another region. Some classes of prehistoric remains are more richly documented here than anywhere else, especially the Neolithic Urfinnis ware. In many cases the finds here illustrate admirably the theory of cultural lag and point out the direction of cultural spread in various periods. The author was fully cognizant of the importance of his material and he has presented it with exemplary speed and fullness of detail. The illustration is adequate, but sometimes the images are too small for profitable study and the quality is not always of the best. The three color plates are very welcome and give a good, though not always absolutely true, idea of the very colorful Neolithic pottery. Both the translator and the reviser are to be congratulated on the very good English text they have produced. Nothing is so important to the student of prehistory as the accurate and timely reporting of excavations and this excellent report now becomes one of the important basic documents for the study of Greek prehistory.

PARIS

SAUL S. WEINBERG

ARCHAIC ATTIC GRAVESTONES, by Gisela M. A. Richter. *Martin Classical Lectures*, Vol. x. Pp. xvi+166, figs. 108. Published for Oberlin College and the Metropolitan Museum of Art by Harvard University Press. Cambridge, 1944. \$2.50.

This attractive book supplements Miss Richter's monumental work *Kouroi* (1942). It is based on the chronology established there and uses the historical events of the sixth century as an enlightening background for the evolution of Attic



stelae, just as *Kouroi* did for the statues of young men. The shaft of the stele, indeed, is almost always decorated with the profile figure of a man, in most cases nude, like the free-standing *kouroi*, but sometimes draped in chiton and mantle like Lysias (fig. 94), or in full armor like Aristion (fig. 93). A female figure appears only once, in "the brother and sister stele" in New York (figs. 73-75), where the little girl stands in the background beside her big brother.

Most of these stelae were already well known, and several in New York, which play an important part in the book, have already been published by the author. Thus the brother and sister stele appeared in *AD.* iv, 1929, pp. 33 ff., pls. 19-20; the same and others have been discussed in *B.M.A.* xxxv, 1940, pp. 178 ff., figs. 1-4; 1944, pp. 233 ff., pls. 1-iv; and in *A.J.A.* xlv, 1941, pp. 159 ff., figs. 1-9; xlviii, 1944, pp. 321 ff., figs. 1-10, pls. vii-xi. In her articles of 1944 the polychromy and the technique of painting were fully discussed and illustrated with colored restorations by L. F. Hall. But in the new book many other stelae and scattered fragments have been inserted in the right places and used to build up a well considered sequence.

The main merit of the book in my opinion lies in the fact that the shafts have been brought into connection with their bases and surmounting finials. Thus convincing reconstructions and a visualization of the complete monuments in their gradual evolution have been attained. According to the author, two main types existed (see figs. 26-27). One begins in the late seventh century and ends in the third quarter of the sixth century; the other begins around 535 and ends in Attica around 500 B.C. The main characteristic of the first type is a sphinx as finial over a capital, which in type I a is a simple cavetto with throat moulding (fig. 5); in type I b it is decorated with rosettes and lotus (fig. 9) or figures of horsemen and mourners, as in the one from Lamprai (figs. 43, 46-47); and in type I c it has two double volutes of lyre design and palmettes (fig. 73). Type II has a finial decorated with one pair of volutes crowned by a palmette, carved in one piece with the shaft (figs. 18, 23, 104-105). The double volute capital of type I c and the palmette finial of type II, have an Ionian origin. The latter continues outside Attica in the first half of the fifth century, during a period when the carving of gravestones seems to have ceased in Attica at the time of the Persian War. Perhaps the Attic artists, finding no employ-

ment at home, wandered to other parts of the Greek world, where Ionian and Boeotian artists could learn from them (p. 122 f.). Only at the time of Pericles was sufficient work again found for sculptors in Athens.

The change from the elaborate form with capital and sphinx, each worked in a separate piece, to the more modest form with the palmette-volute finial carved in the same piece with the shaft, is explained convincingly by an anti-luxury decree quoted by Cicero (*De Legibus* ii, 26, 64). This decree, heretofore attributed to Kleisthenes in the late sixth century, is rightly assigned by Miss Richter to Peisistratos about 535 B.C. (pp. 90-92). It prohibited the building of tombs which required more than three days work for ten men.

An interesting problem of interpretation which has not yet been satisfactorily solved is offered by the panels at the bottoms of the stelae between shaft and base. While the Gorgon (fig. 61) is certainly rightly explained as an apotropaion and thus a parallel to the sphinx as the guardian of the tomb, the significance of the warrior mounting a chariot (figs. 66-67) and the horsemen (figs. 94, 100, 101) has not yet been definitely established. Gisela Richter thinks it probable that the warrior is likened to a mythological hero and that the chariot moreover points to the aristocratic lineage of the dead man (p. 60). For the horseman she suggests that he is the squire of the deceased signifying his knightly rank (pp. 34, 104). Beazley thinks that the rider on the predella of the Lysias stele is a jockey and that therefore Lysias is a "race-horse owner" (quoted by G. Richter, p. 103 f., note 12). I see no reason to believe that Lysias is anything else than a priest, holding as he does twigs and a kantharos; he may not be necessarily a priest of Dionysos, but of some other cult. Perhaps one might recall the old explanation of Malten ("Das Pferd im Totenglauben," *JdI.* xxix, 1914, pp. 179 ff., 253 ff.; cf. especially pp. 217 ff.) that the horse is the death horse, belonging to the ruler of the nether world, which carries away the deceased. Out of this symbolic representation develops the concept of the deceased hero on his horse. If we combine this with Miss Richter's explanation of the knightly rank of the dead, we might find the correct solution. Only men of high rank, who were able to have horses, were given the symbol of the death horse and the honor to be served in the life beyond by a horse and a squire. Thus the horse and also the chariot might point to the aristocratic lineage of the dead men. A modern



survival is the custom of leading the favorite horse of the deceased in the funeral procession, as was recently done for President Roosevelt.

Lists of abbreviations, of the dimensions of stelae and of the illustrations; a general index, and an index of collections add to the usefulness of this carefully compiled book. The only mistake I noticed is the error of the printer who turned upside down the fragment of a cavetto capital found on the Akropolis (figs. 44-45).

One can await with great expectation the promised book *Archaic Greek Art against its Historical Background*, Mary Flexner Lectures at Bryn Mawr, 1941, the publication of which has been postponed by the Oxford Press for the duration of the war. It will continue to improve and enrich our knowledge of one of the most important periods of ancient art.

COLUMBIA UNIVERSITY

MARGARETE BIEBER

MANUEL D'ARCHÉOLOGIE GRECQUE. LA SCULPTURE II, PÉRIODE CLASSIQUE, V<sup>e</sup> SIÈCLE, by Charles Picard. Pp. 1016, figs. 363, pls. xxx. Éditions Auguste Picard, Paris, 1939.

This welcome book is the second volume—in two stout parts—of the manual on Greek sculpture of which the first volume, on the archaic period, appeared in 1935. It is to be followed by a third volume on the fourth century B.C., and concluded in a fourth dealing with the Hellenistic period. The whole is intended as a more detailed presentation than the author's *Sculpture antique* (1923, 1926), which was confined to two volumes and which brought the story down to the Byzantine period. M. Picard is to be congratulated on the completion of this second installment, which contains over 1,000 pages of text, almost 400 illustrations, and a wealth of footnotes with pertinent bibliographies. When finished the "manual" will be the most fully documented and up-to-date history of Greek sculpture that we have.

Only someone who has dealt with the subject himself can appreciate the labor involved. The author has spared no trouble. He has given us not only an astonishingly comprehensive history of fifth-century Greek sculpture, with discussions of the chief moot points in dating and attribution, but also an account of archaeological research during the last half century. In text and footnotes the various opinions of past and present authorities are presented—and often demolished. After reading page after page of these discussions we become acutely aware of the lamentable state of

our definite knowledge and of the valiant attempts of archaeologists to fill the endless gaps. For instance, the game of attributing the limited number of extant sculptures to the comparatively few sculptors whose names have survived has proceeded for a long time with sparse results.

When dealing with so many facts and fancies it is difficult not to get entangled in the various controversies and to give a clear and dispassionate picture of our present actual knowledge. M. Picard has generally acquitted himself well of this task and has steered his course with Gallic taste and common sense. Naturally, as the author himself predicted in the preface to his first volume, every reader will occasionally find points of disagreement. When so much information is offered, often on controversial matters, concurrence *in toto* is neither possible nor healthy. Having stated my admiration and appreciation of the book, therefore, I shall point out some of the major and minor points with which I find myself not in full agreement.

There are weighty arguments in favor of both a late sixth- and an early fifth-century dating of the Athenian Treasury at Delphi. Pausanias' statement that the Athenian Treasury was built with spoils taken from the army which landed at Marathon under the command of Datis has been thought to favor the later date, whereas important technical and stylistic considerations have been advanced for the earlier assignment. In such a case—since there is a possibility that Pausanias was misled by the inscription "first-fruits won from the Medes at the battle of Marathon" on an adjoining platform—it seems essential to give the evidence on both sides of the argument. M. Picard, however, makes no mention of Dinsmoor's important observations that the Treasury still has the swallow-tail clamps, whereas the platform has the later double Γ and double T clamps; that the material of the Treasury is Island marble, not Pentelic which became usual for official buildings after 500; and, above all, that not only is there no "intimate physical connection between the trophy base [i.e. the adjoining platform] and its foundation on the one hand and the corresponding portion of the Treasury on the other," but that "the physical evidence would require the Treasury to be already in place, or at least begun, before the trophy base" (cf. Dinsmoor in Richter, *The Sculpture and Sculptors of the Greeks*, p. 126, note 45, and in *Studies in the History of Culture*, 1942, pp. 187 ff., 200, from which my quotations are taken).



In 1920 Langlotz argued that the rendering of the drapery in the metopes points to a late sixth-century date for the Treasury, I may add the evidence of anatomical rendering. The deep groove surrounding the *rectus abdominis* in some of the metopes, for instance the one with Herakles and the Kerynaean stag, occurs also in the ball player of the statue base in Athens and in other sculptures generally dated before 500. In the sculptures of about 490–480—for instance those of the Eastern pediment of the temple of Aphaia at Aegina—the boundary of this muscle is no longer so sharply defined, but passes imperceptibly into the adjoining parts. And this seems to be the case, as M. Picard points out, also in a few figures of the Delphian metopes (e.g. the Minotaur).

The dating of the Treasury, therefore, presents difficulties. Is it possible to combine the two sets of arguments for an early and a late date by supposing that the building was begun soon after 506—after the establishment of the Athenian democracy under Kleisthenes—but was interrupted for some reason, and not completed until after Marathon?

Whether Pheidias' chryselephantine statue of Zeus at Olympia was created before or after the Athena Parthenos is also a subject on which there is no general agreement among ancient or modern authorities. M. Picard—with some acerbity toward his opponents—argues for the earlier date (pp. 347 ff.). That is his right; but the upshot nevertheless is that until we have new and more decisive evidence Picard's case is not proven. And it is hardly strengthened by advancing as "one of the strongest arguments in its favor" the placing of the respective statues in their temples (p. 376). Surely Pheidias, when he was called to Olympia—whether before 450 or after 438—had to accommodate himself to a completed architectural design.

It is now, I believe, generally accepted that the Idolino is a Roman copy, not a Greek original (p. 270). The discovery in the Magazzini of the Vatican of a piece of a black basalt head belonging to a replica has thrown new light on this question (cf. Kaschnitz-Weinberg, *Sculture del magazzino del Museo Vaticano*, 1937, No. 60, pls. xix–xx). The bronze horse from Cape Artemision has now been recognized as a Hellenistic, not a fifth-century, work (p. 253), and as part of an ensemble with the bronze jockey. In citing Euphronios' vases as a landmark for dating (p. 218) we must clearly distinguish between the painter Euphronios, whose extant works belong to the concluding decade of

the sixth century, and the potter Euphronios, who was active during the first third of the fifth century. Painter and potter may not even have been the same person (see my forthcoming *Attic Red-Figure*).

It is necessary, when a new work that has not been unearthed during scientific excavations is published, carefully to weigh its authenticity. In these days of expert forging the pitfalls are many and the danger of admitting spurious documents in our midst is considerable. Only after an object has been examined and reexamined by competent authorities and not found wanting can it be generally accepted. It is tempting under these circumstances to play safe and condemn all newcomers. By doubting everything one will sooner or later be proved right in something and in the meantime be lauded for one's caution. This extreme scepticism can be indulged in with impunity—except by a curator, who with such an attitude might miss many an opportunity and lose his usefulness to his Museum. Surely, however, the time has now passed for doubting such monuments as the three-sided relief in Boston (p. 142), the seated goddess in Berlin (pp. 110 f.), and the girl with the pigeons in New York (p. 96). The finding place of the Berlin goddess has been competently established by Mrs. Zancani Montuoro, that of the Boston relief is also authoritatively reported, and the New York relief—formerly at Brocklesby House—was known to have been in Paros in 1785, long before the present skilful output of forgeries was begun. If these monuments have some unusual features they merely enlarge our scanty knowledge of Greek art.

The evaluation of forgeries is a subject in which a modern curator is apt to acquire extensive experience through the years; for out of every five objects offered to his Museum at least one is likely to be suspect, and he has the responsibility of making the final decision. In forming an opinion he is helped by stylistic criteria, by comparisons with extant works, authentic and spurious, and above all by the consideration of what is possible and what is not possible in Greek art. There is, however, another factor, the importance of which has by some of us been somewhat neglected, but which in many cases is decisive—the physical condition of an object. Certain incrustations, patinas, decompositions have not yet been imitated, to my knowledge, by any forger, however expert. It is therefore worth while to publish the following fact regarding the Boston relief. When



it arrived in England from Italy more than forty years ago; before its acquisition by the Museum of Fine Arts, it was covered, I am told on excellent authority, with a hard lime incrustation. Mr. Gearing of Lewes House informed me several years ago that it took him months to remove this incrustation with a sharp razor. (Extensive traces are still visible at the back). It seems inconceivable that such a hard, strongly adhering deposit should have been artificially produced forty years ago. At all events I know of no parallel case.

At the end of the second part of M. Picard's book are valuable additions and corrections (pp. 899-930). To these we may append others: another replica of the Eros Soranzo (pp. 121, 123) is in Oxford—a loan by Beazley and Ashmole to the Ashmolean Museum. The marble statue of a young woman said to be from South Italy (p. 674) has recently been acquired by the Metropolitan Museum (*BMMA*. i, new series, 1943, pp. 206 ff.). A monograph on the "Pseudo-Theseion," now definitely identified as the Hephaisteion, was published by Dinsmoor under the title "Observations on the Hephaisteion" in *Hesperia*, Supplement v (1941). Several important new fragments of the metopes, including the head of Eurystheus, came to light during the recent American excavations and are there discussed and illustrated. The bronze statuette of Herakles from Arcadia in New York, assigned by Picard to about 540-530 B.C. (p. 160), is published in *Master Bronzes, Selected from Museums and Collections in America*, 1937, No. 71, where I advanced reasons for a late sixth-century date. The marble statuette of an Amazon of the Mattei type (pp. 518, 575, 927) was recognized as suspect soon after its publication in *BMMA*. in April, 1933, and withdrawn from exhibition. Since then several reduced copies of well-known statues have appeared on the market—including an attractive little Ares Borghese. All are evidently products of the same "factory." The terracotta statuette of a Diadoumenos in New York was put together from several fragments and the few missing parts restored (cf. *BMMA*. xxvii, 1932, pp. 250 ff.). The phrase, "qui a été retravaillé, semble-t-il" (p. 288), suggests that the ancient parts have been reworked, which is surely not the case.

M. Picard's extensive references in his footnotes do not include two outstanding works—*Classical Sculpture* by A. W. Lawrence (London, 1930) and *Greek Sculpture and Painting* by J. D. Beazley and B. Ashmole (Cambridge, 1932). The latter is a

reprint of the chapters on Greek art in the *Cambridge Ancient History* and is easily the best concise account we have of the subject.

In conclusion a word must be said in praise of the many illustrations which M. Picard has skillfully selected for his manual. They include not only the familiar works of capital importance, essential for an understanding of Greek sculpture, but many an attractive recent discovery. They add greatly to the general usefulness of the book. We may predict that M. Picard's great work will become an indispensable reference book for every student of Greek sculpture.

THE METROPOLITAN MUSEUM OF ART      GISELA M. A. RICHTER

LE PORTRAIT DANS L'ANTIQUITÉ D'APRÈS LES MONNAIES, by Jean Babelon. Pp. 200, pls. 32, with 308 reproductions of coins. Payot, Paris, 1942. 125 fr.

This well printed book begins with an Introduction, a philosophical analysis of The Portrait (35 pp.), and is then divided into five chapters. Chapter I, Primitive Monetary Art, with the sub-titles, From the Seal to the Monetary Type; From the Animal Type to the Human Profile; and The Idealized Human Effigy (21 pp.)—an artistic and historical discussion of Greek coin types which includes certain dynastic and satrap portraits. Chapter II, Hellenistic Art and the Expressive Portrait, sub-title, Reciprocal Influences of the Orient and Greece (41 pp.), contains a detailed account of Hellenistic and later coin portraits, after some comment on the evolution of the Greek coin portrait. Chapter III, The Realistic Roman Portrait and its Development in the Imperial Period, with sub-title, From Pragmatism to the Decorative Constructivism of the Late Empire (48 pp.), covers the detailed study of Roman Imperial portraits. It begins with some remarks on the "restored" portraits on Roman Republican coins, and the influence on Roman portraiture of Etruscan art and ancestor worship. Chapter IV, The Byzantine Portrait, with sub-heading, From Constantinian Stylization to Hieratic Symbolism (21 pp.), is a detailed study of Byzantine portraits, but commences with Constantine under whom, according to the author, Byzantinism in art and customs began. Like the preceding chapters, it includes art-historical analysis. Chapter VI, Coins of the Barbarians, sub-title, Paralogical Imitations and Deformations, i.e., those based upon misunderstanding of the original types (14 pp.),



sketches briefly the money of the Gauls, Goths and Franks, and concludes the story of portraiture by noting the isolated revival of the Roman imperial type in 1232, and the beginning of interest in the monetary portrait and the medal at the end of the fifteenth century.

As one will see, the material of this comprehensive essay is well arranged. But the reader is bound to be disappointed in the placing of the coin plates. These would have been far more useful at the end of the text, instead of inserted in the text without regard to context. Thus, it is most disconcerting, while reading about the Syrian kings on p. 96, to be confronted with pl. xv illustrating the Sasanian rulers. And, alas, the text contains no plate references to the coins illustrated, so the reader must rummage among the plates trying to locate the portraits mentioned. Furthermore, there is no index of rulers, only a Table of Plates. These omissions, coupled with haphazard placing of the plates in the text make it difficult to enjoy this very readable essay.

It is perhaps the lack of plate references in the text which caused the series of errors in naming the Syrian kings, p. 201, pl. VIII. Here, No. 4, Seleucus IV, No. 6, Demetrius I, and No. 11, Demetrius II, are all called Antiochus IV, an incredible confusion; No. 7, Antiochus III, is named Demetrius I. Incidentally, the kings should have been arranged in chronological order, and designated Seleucus I, Antiochus I, etc. for convenience sake, instead of by their surnames. In passing, we may note that the head, pl. VIII, 8, is not that of Antiochus V, as stated by implication in the text, nor was this Antiochus the son of Seleucus III as given in the Table of Plates. This is the portrait of the "Young Antiochus," infant son of Seleucus IV, who ruled from 175-169 as joint-king with Antiochus IV.

Another curious mistake is the use of the portrait of Prusias I of Bithynia, pl. III, 11, for that of Perseus of Macedonia. As to arrangement, the head of Seleucus I struck at Pergamon, pl. IV, 3, should have been put among Syrian portraits, and on all of the plates the kings of the various dynasties ought to have been kept together and in chronological order. Pl. V is devoted exclusively to the kings of Pontus, a desirable arrangement, but the rulers are not in chronological sequence. The Roman and Byzantine emperors are much more satisfactorily arranged on the plates.

This reviewer has noticed some further errors. The gold octadrachms of Antiochus III were

struck at Antioch, not at Ecbatana in Media, though the gold bullion came from a temple in Media. The victory of Demetrius I Poliorcetes off the island of Salamis in 306 was not immortalized by the famous statue called the Victory of Samothrace in the Louvre, which belongs to a later date. The date of Demetrius I's first issues is not 292 but 301-295. Lysimachus was not represented wearing the horn of Ammon, but rather struck coins with Alexander wearing this symbol. Demetrius I wears a bull's horn, but it is that of Poseidon, not Dionysus. The statement about Lysimachus (p. 67) was, of course, merely a slip; cf. p. 75; and the bull's horn of Demetrius was formerly interpreted as that of the god, Dionysus. The portrait, pl. XIV, 8, is that of Mithradates I of Parthia, not Mithradates II. The coin of Kleopatra VII of Egypt, pl. X, 7, is of silver, not bronze. The coin of Berenice II described on pp. 99 and 100 is not one of her gold decadrachms as stated, but one of her very rare gold octadrachms.

Despite these strictures on details of arrangement and specific errors in the Greek section, this reviewer finds that the author has written an excellent summary of portraiture on ancient coins, carried over a long period of time. It is distinguished by learned commentary on the historical background of the picturesque and always absorbing Hellenistic, Roman and Byzantine periods, as well as by acute and appropriate observations on the artistic nature of the coins, and pithy remarks on the characters of the individuals portrayed.

AGNES B. BRETT

THE BERTHOLD MISSAL, THE PIERPONT MORGAN LIBRARY MS 710, AND THE SCRIPTORIUM OF WEINGARTEN ABBEY, by *Hanns Swarzenski*. Pp. 138, pls. LXIII and frontispiece; one plate in color. The Pierpont Morgan Library, New York, 1943.

In 1926 The Pierpont Morgan Library added to its collection an important group of illuminated manuscripts that belonged once to the Treasure of the Benedictine Abbey of Weingarten, a Swabian Monastery patronized by the House of the Guelphs. This group consists of two eleventh-century Anglo-Saxon Gospels donated to Weingarten by the Countess Judith of Flanders (1032-1094), wife of Duke Welf IV of Bavaria, and two Missals illuminated in the Weingarten Scriptorium during the thirteenth century, one being commissioned by its Abbot Berthold (1200-1232), the other by a Hainricus Sacrista.



In a handsome volume the Berthold Missal has found a publication that is worthy of this outstanding manuscript of the early thirteenth century. It is highly to be commended that its miniatures are reproduced in actual size, although these reproductions cannot by necessity do full justice to the beautifully crisp design of the original. One plate in color gives the reader at least an idea of the superb coloristic values of the manuscript. The volume reproduces furthermore other miniatures by the hand of the same master, and examples of the earlier and later Weingarten production, together with interesting and partly unpublished illustrative material for comparison.

The task of writing the text has been confided to Hanns Swarzenski, which was a happy choice, indeed. In various articles and in his important *Corpus of German Book Illuminations of the Thirteenth Century*, Swarzenski has proved to be an authority in the field of mediaeval miniatures. His comprehensive knowledge, not only of miniatures, but equally so of goldsmiths' art, and his ability to interpret facts carefully and to present substantially founded hypotheses make him particularly well equipped for the task of analyzing the style of the Master of the Berthold Missal and for determining its position within thirteenth-century book illumination.

In the first chapter of his book Swarzenski examines the Scriptorium of Weingarten in the twelfth century. He confirms and elaborates the fact, recognized for a long time, that the Anglo-Saxon as well as the Flemish manuscripts given to the Abbey by Countess Judith exerted a strong influence on the Weingarten production in the twelfth century. Since works created later in this century show a more rigid style, he suggests as a possible general factor determining this change the "strict and severe mentality" of Hirsau, the German Cluny, which gave four of its monks as abbots to Weingarten.

The second chapter sheds light on the unusually interesting personality of Abbot Berthold, whose "new sense of cultural responsibility" is attested by contemporary documents. They show him as an ardent patron of the arts, and he must have been aware of this function, for at least five or six portraits of him are preserved either in manuscripts or on book-covers. Abbot Berthold commissioned illuminators who followed traditional lines with the decoration of several books, yet he found a truly congenial artist in the Master of the Berthold Missal, a painter of outspoken individu-

ality and outstanding quality, gifted with inventive power, but open to stimulation from other centers of art.

It is the work of this artist which Swarzenski discusses in the next chapter. Three manuscripts, in addition to the Berthold Missal, can be ascribed to him: a Book of Eight Prophets in the Public Library of Leningrad, a Codex containing Six Prophets and Lives of Saints in the New York Public Library (an attribution made in 1928 by Swarzenski), and two miniatures inserted in a Gospel-Book now in Stuttgart.

Whoever examines the Berthold Missal will be struck by its powerful figure style characterized by tense poses, strong facial expressions and striking gestures. These dramatic elements, tending sometimes towards vehement movement, are stabilized by beautifully patterned frames and are controlled—to use Swarzenski's definition—by the artist's "highly developed sense of order and form," even in mass scenes of an almost rotating movement, like the Last Supper or Pentecost. It is a style that is dynamic because of the tense interrelation of linear and plastic values with lively color rhythms.

The importance of the Berthold Missal was recognized before, for various reasons, its artistic quality not the least among them. To Panofsky, for instance, it seemed likely that the style of the sculpture on the Bamberg choir-screens was derived from miniatures similar to those of the Berthold Missal (*Die Deutsche Plastik des XI.-XIII. Jahrhunderts*, Munich, 1924, p. 134). Miriam Schild Bunim realized the bold devices used by its artist to suggest movement in depth (*Space in Medieval Painting*, New York, 1940, p. 124). The Missal certainly poses interesting problems that are discussed by Swarzenski for the first time in a comprehensive manner. Swarzenski adopts a method that combines and interrelates style criticism, iconography and historical evidence, a method that is especially fruitful throughout the book for the ticklish question of dating manuscripts. He uses an almost overwhelming richness of detailed observations. His approach to determine the position of the artist is essentially new. He brings to light the interesting phenomenon that the donations of Countess Judith, so important for the Weingarten Scriptorium during the twelfth century, influenced again, although not decisively, the Master of the Berthold Missal and "may even have opened the way to a unique assimilation of contemporary English and Flemish art" by the artist. Yet the attitude of the thir-



teenth-century illuminator is, as Swarzenski points out, different from the one of his predecessors. The works that are most important for the formation of his style are primarily contemporaneous. They are a stimulus for his creative power rather than objects of careful imitation. They comprise not only miniatures, but also metalwork. Equally free is the artist's attitude towards Byzantine art. Swarzenski emphasizes the fact that the artist is not swept away, so to speak, by the powerful wave of Byzantine art, like other illuminators. Strong as this influence undoubtedly is, the artist transforms it in a very personal, dramatizing manner.

This chapter reveals other important points. I may mention the following: the plastic conception of the figures and the intensity of their movement was very likely stimulated by enamels of Nicolaus of Verdun and bronze sculpture of Lower Lorraine. The similarity of certain ornamental motives with English nielli and trans-Mosan metalwork is strikingly presented. Swarzenski draws the conclusion that goldsmiths' works, given to Weingarten by foreign donors, yet no longer preserved, might explain this influence. This hypothesis gains credibility by the fact that Weingarten remained closely connected with the House of the Guelphs, which itself was manifoldly related to the Kings of England and the trans-Mosan regions. At any rate, the ability of the master to be stimulated by other centers of art accounts, if one may say so, for the international elements of his style, which far surpasses the earlier and subsequent production of the Weingarten Scriptorium.

Swarzenski analyzes concisely the essentials of the master's own style and suggests his artistic evolution, but a more specific characterization would have added to the scope of the chapter. Problems such as the importance of frames and architectural motives in the design of the miniatures or the relation of figure style to decorative elements may well deserve further analysis.

The beautiful and richly decorated silvergilt book-cover of the Missal is thoroughly discussed. Here again one finds excellent discoveries based on minute observations. Swarzenski relates the iconographic program of the upper cover to the text of the new dedication of the church at Weingarten in 1217. This allows the conclusion that the cover was created for this occasion. Swarzenski emphasizes the possibility that a small piece of gold cloisonné incorporated in the book-cover may have belonged originally to the Reliquary of the Holy Blood given to the Abbey by Welf IV and

Judith. This suggestion increases the importance of the cover and fits well the further assumption that Berthold intended to make the book-cover, because of the cruciform shape emphasized on the upper side, a reliquary rather than just a book-cover that also contained some relics.

The last chapter deals with the followers of the Master of the Berthold Missal. Swarzenski analyzes their "gradual development towards the prettifying tendencies of the new Gothic style." With convincing reasons he dates the Missal of Hainricus Sacrista after the Berthold Missal, thereby correcting an opinion to the contrary that was generally accepted hitherto. The Appendices describe fully the manuscripts illuminated in Weingarten during the first half of the thirteenth century and give texts of documents concerning the art production in Weingarten and the activities of Abbot Berthold.

To read this book is stimulating. The relating of the miniature style of the Master of the Berthold Missal to great contemporary art centers explains the puzzling fact that this superb style of truly international scope appears in a Swabian scriptorium without outstanding artistic tradition. Repeatedly important outlooks into problems of mediaeval art are opened up, in the text itself and in elaborate footnotes. Swarzenski's book is revealing, I am sure, not just for students of miniatures, but likewise for those of iconography and mediaeval sculpture. It gives insight into the varying history of a scriptorium and enriches our knowledge of the personal attitude of a Romanesque artist, and of mediaeval patronage. And it will be not one of the least merits of this book that its readers will be tempted to study and enjoy the original manuscript in The Pierpont Morgan Library.

VASSAR COLLEGE ADOLF KATZENELLENBOGEN

LES CHAPITAUX DU CLOÎTRE DE NOTRE-DAME LA DAURADE, by Marie Lafargue. Pp. viii+128, pls. xxxii. Édition Auguste Picard, Paris, 1940.

This important book is a study of the Romanesque capitals and abaci from the former cloister of Notre-Dame-la-Daurade in Toulouse. It grew out of the thesis of the author at the École du Louvre in July 1934. (Printed summary in the *Bulletin des Musées de France* 6, 1934, pp. 151-153. The first section was published in its essential form in the *Bulletin Monumental* 1938, pp. 195-216). The capitals of la Daurade are now housed in the Musée des Augustins, Toulouse, whither they were



brought after the cloister was demolished in 1811. Around 1890 they were regrouped carelessly with other capitals in the museum and their identity lost.

The author shows great discernment in her grouping of the Daurade capitals and abaci. Several other capitals which have previously been attributed to the cloister she attributes to a chapel adjacent to the cloister, and her attributions seem to be an improvement over the earlier ones. Unfortunately, the datings and the generalizations on iconography are sometimes unconvincing and sometimes inaccurate.

In the first chapter, Mlle. Lafargue quotes from a manuscript of Dom Claude Chantelou, a xvii-century Benedictine scholar, and adds substantial evidence that the church of la Daurade was pagan in origin. Her interpretations of his text are convincing. Mlle. Lafargue also quotes Chantelou to prove that the famous lost mosaics of the church were contemporary with those of Santa Maria Antiqua, Rome, made under Sixtus III (432-440). She argues that, since the lost mosaics of la Daurade are described by Chantelou as containing cubes made of glass with gold leaf covered by a thin layer of top glass—like those of Santa Maria Antiqua—the mosaics in the two churches must be contemporary. This argument is slender indeed, since this technique was also common in Constantinople and Ravenna, in fact, was common through centuries of Byzantine mosaic. Miss Helen Woodruff's dating of the lost mosaics in "the fifth or sixth century under Ravennate influence" is based on much more comprehensive data and is therefore more convincing (*Art Bulletin* xiii, 1931, pp. 80-104).

One of the interesting discoveries the author has made from the papers of Chantelou, as J.-J. Marquet de Vasselot points out in the Preface, is a record of a "horrible embrasement" at la Daurade which took place in 1464. The marks from this fire were still visible to Chantelou on the marble columns surrounding the cloister "dont le lustre et l'esclat fut tout bissé par les flammes." This fire explains the black patina on many of the capitals. Perhaps because of this patina the author has not always supplied photographs clear enough for the reader to follow her argument in every case.

The author's main interest in Chantelou's manuscript is to prove that the cloister of la Daurade was built in the xi century. She quotes Chantelou who says that Saint Hugh, Abbot of Cluny

(1060-1071), "put his hand to the work" of rebuilding the ruined priory of la Daurade, including "besides the big cloister, a little one adjacent to the house of the prior." According to Mlle. Lafargue, a xvii-century print of the monastery bearing the date "1080" gives evidence that la Daurade was by that date rebuilt, since "in the Benedictine order the date indicated is always the date of completion." The author, who divides the capitals into two groups, consequently dates the earlier groups around 1075, instead of in the early xii century "as everybody has agreed in saying." This last statement is not quite accurate, since the late Kingsley Porter also put the capitals in the xi century by calling them "slightly more archaic" than those of the cloister of Moissac which has an inscription bearing the date 1100 (*Romanesque Sculpture of the Pilgrimage Roads* i, p. 242).

The second group of capitals, finer than the first, is placed between 1115 and 1125 by comparing them to the "later" capitals from the portal of the chapter house of Saint-Etienne in Toulouse. In the printed summary of her thesis the author gave a more reasonable date "vers 1125-1130" and a little after the apostle statues of the Saint-Etienne chapter house.

On the basis of evidence offered by Lafargue, this early dating for la Daurade (first group) seems somewhat doubtful. Granted that the capitals of Moissac and la Daurade are very closely related, it does not inevitably follow that those of la Daurade (first group) inspired the more sophisticated and beautiful capitals of Moissac. La Daurade was rebuilt as a dependency of Moissac under the order of Cluny and it might be that the finer work of Moissac inspired the more provincial work of its dependent priory. It is in large part a question of what is "provincial" and what is "primitive." The author goes even farther, however. She sees in this first group of capitals from la Daurade the birth of the Languedoc school of sculpture. Even more startling is her conclusion that from the second group of capitals "est sorti, en partie, le grand courant qui devait, à Saint-Denis et à Chartres, préparer l'avènement du style gothique." This conclusion makes a rather small horse draw a very large cart.

The "1100" inscription at Moissac does not prove that work on that cloister was begun only after work at la Daurade was finished; nor does Chantelou's statement that Saint Hugh had "put his hand to the work" of rebuilding la Daurade prove that the cloister of la Daurade was finished



by him. Raymond Rey (*La sculpture romane languedocienne* 1936, p. 153, note) says: "Il va de soi que le rattachement de la Daurade à Cluny en 1077 ne prouve nullement que les travaux du cloître aient commencé à cette époque. Les travaux commandés par saint Hugues s'appliquèrent sans doute aux autres bâtiments du monastère." Priority of date does not seem to be too vital to the question of the development of the Languedoc style, since Moissac and la Daurade represent but slightly different phases of the same atelier. Some of the large relief figures of the cloister piers of St. Sermin at Toulouse have more primitive facial types than are to be found either on the capitals of Moissac or of la Daurade and yet are better carved than the Daurade capitals (first group).

The thorny problem of the priority of the Languedoc style over that of Spain is not very conclusively handled by the author. She admits the influence of Spanish iconography upon la Daurade through the Avila Bible, but denies the influence of Spanish style. Can style and iconography always be separated into such watertight compartments? Iconography similar to that found in the Avila Bible and at la Daurade is also found in Spanish sculpture of the same period, for instance on the cloister piers of Silos (Journey to Emmaus. Deposition and Doubting of Thomas), on a Spanish ivory in the Victoria and Albert Museum (Deposition) and on another Spanish ivory in the Metropolitan Museum of Art (Journey to Emmaus). The author might also have noted the possible influence of Jerome's Prologue (Farfa Bible) and of Benedictine Psalter illumination on the capital of David and his four musicians. This point may be significant since, as she notes, there seems to be a stylistic influence from the manuscripts of Monte Cassino (p. 77) upon la Daurade.

The author does not seem to realize that iconographic types and series usually developed in completer form and at an earlier period in manuscript illumination and in painting than in Romanesque sculpture. In the most surprising statement of the whole book the author says concerning the "Last Judgment" capital of la Daurade that it "created a new iconography in combining elements that already existed," for "these elements are apparently brought together for the first time on the capital of la Daurade since before the XI century, one finds them only separately." That she should imagine that from one small capital could have been created one of the most complex and monumental scenes in mediæval art

makes the reader chary of her other general statements on iconography. At least a century before this capital was carved, a monumental version of the scene was painted on the walls of St. George in Reichenau-Oberzell. This painting was probably strongly influenced by earlier Byzantine art. Other examples could be cited in manuscript illumination. The author might also have noted that the orant type of Christ of the Ascension capital comes from Ottonian manuscript illumination, as Dewald has shown (*AJA.* xix, 1915, pp. 312 ff.).

The chief service of this book is its stylistic groupings of the Daurade capitals. Full credit should also be rendered the author for emphasizing the Chantelou manuscript and for her scrupulously careful descriptions and analyses of the capitals.

THE METROPOLITAN  
MUSEUM OF ART

WILLIAM H. FORSYTH

THE WALL-PAINTINGS OF HORYUJI, by *Naito Toichiro*. Translated and edited by *William Reynolds Beal Acker and Benjamin Rowland, Jr.* Pp. xvii+316, pls. 85 (in separate binding). (American Council of Learned Societies Studies in Chinese and Related Civilizations, No. 5). The Waverly Press, Inc. Baltimore, 1943.

The wall-paintings in the Golden Hall of Horyuji are quite rightly one of the most revered and admired monuments of Buddhism, and they are in truth beautiful and noble things. They were made, as were the Byzantine mosaics, to give those who saw them a visual approach to the teachings of the faith. Buddhism, when it reached Japan, found an eager and receptive people waiting for it, and in its early manifestations, and particularly in these paintings at Horyuji, it appears with more than traces of the countries it passed through. It reached a people avid and sensitive, who had but lately emerged from obscurity and had taken on the culture and language of contemporary Korea almost overnight. The Horyuji paintings retain the greater qualities of mainland painting and add a simplicity which especially endears them to westerners.

Until recently there has been no exhaustive study made of them by western scholars, and in the present work the two westerners involved, Messrs. Acker and Rowland, appear all too modestly as translators and editors of a work by Naito Toichiro, which they have selected from the mass of literature in China and Japan as the best. The result is a magnificent case history on the wall-



paintings of Horyuji which gives us the best Japanese commentaries, an exhaustive discussion of iconography and a survey of the origins across China and Central Asia to India itself. It presents a wealth of material and will no doubt be the standard reference book for many years to come.

The book has a valuable essay on the relation of the Horyuji wall-paintings to Indian and Central Asian painting and religion by Benjamin Rowland, and the four edited and annotated chapters by Mr. Toichiro. These comprise a descriptive introductory chapter on the Kondo or Golden Hall itself, two chapters of the iconographical study of the four paradise scenes of the four large walls and of the eight Bodhisattvas of the eight small wall sections, and a chapter on the origins and date of the Horyuji paintings. Mr. Toichiro suggests that the wall-paintings were actually executed about 707-708 A.D. and that they must certainly have been completed before 711 A.D.—a conclusion which will satisfy most people—both East and West.

Mr. Acker and Mr. Rowland collaborated on the translations; Mr. Acker edited the sections on iconography, Mr. Rowland those on origins and dates.

Mr. Toichiro has presented a great deal of evidence and discussion of the various Buddhas and their paradises; he has been careful to review the opinions of other writers both ancient and contemporary, and to give countless references of great interest. With this done, it would be valuable to the student and laymen alike if Mr. Rowland and Mr. Acker would follow up their editing of Mr. Toichiro with a clear and simple exposition of their conclusions severely pruned of reference and discussion. With their patent interest in and love for these paintings and with the present exhaustive work they are eminently in a position to do it, and we will all be grateful to them if they do.

The book has an accompanying binder of small plates, well chosen and as good as small plates can be. Whoever devised the binder should be guillotined immediately. It is almost impossible to return the plates to it without jamming them. Owners will find it a relief to slit the top and bottom edges with a penknife and make it into a usable folder.

THE METROPOLITAN  
MUSEUM OF ART

ALAN PRIEST

STONE MONUMENTS OF SOUTHERN MEXICO, by  
*Matthew W. Stirling*. Pp. vii+84, Pls. 62, text-

figure drawings, 14. Smithsonian Institution, Bureau of American Ethnology, Bulletin 138, 1943, Washington, D. C. .35.

This is essentially a descriptive illustrated catalogue of the stone monuments at four Middle American sites—Tres Zapotes, Cerro de las Mesas and La Venta on the Gulf coast, and Izapa on the Pacific coast. The first three are peripheral to the Maya area proper, in western Tabasco and eastern Vera Cruz; the last is in Chiapas near the Mexican-Guatemalan border. The grouping of a Pacific coast site with those on the Gulf coast is in accord with the obvious fact that ancient connections of some sort existed—probably by way of the low Isthmus of Tehuantepec. This lies to the west, away from the Maya area proper. A major problem is that of the time relationship between classical lowland Maya sites and "Olmec" or "La Venta" sites of the type here reported on, as to monuments only.

Stirling's numerous expeditions for the Smithsonian Institution and the National Geographic Society have brought this problem to the fore, and he has discovered many previously unknown monuments in the Vera Cruz-Tabasco region. Abstracts of two reports on the ceramics at Tres Zapotes have appeared in this JOURNAL; another report on those of Cerro de las Mesas has been published (same series, No. 141). While excavation is mentioned, only one week was spent at Izapa, and the results appear to be mainly the result of surface reconnaissance only. Apparently this volume may be considered as definitive for the monuments of the Gulf coast sites, but others may be expected to appear at Izapa. "It is probable that the habitation level of the site is rather deeply buried."

The publication is a gold mine of factual material on sculpture at these important sites. For each site there are very short sections of "Conclusions" at the end of the monument-by-monument descriptions. Chronological groupings are attempted. Of necessity, these are almost entirely based on typological reasoning. There is no stratigraphy of actual monuments and very little opportunity of relating a monument to a particular period in the ceramic sequence of the site.

The last section of Conclusions (pp. 72-74) includes some reasoning of a general nature, but no claim to finality is made. In the Pacific coast region two monuments show long numbers—one at El Baul and another at San Isidro, though none appears on the monuments so far found at Izapa.



There are three among the Gulf coast sites—two at Cerro de las Mesas, and one at Tres Zapotes—the latter, on Stela C, supposed to read 7.16.6.16.18. It has been questioned whether numbers on monuments not of classical Maya style need be considered as counted from the classical Maya base-date; and also whether the numbers are formed in the classical Maya system, which is not vigesimal in its third or “tun” term. These questions are not discussed, but the assumption is made that the Maya base and the Maya arithmetical system apply, so that these numbers are “Initial Series.” Stirling thinks that “if the Initial Series occurring in this area represent contemporary dates, it would seem probable that the long-count calendar was used here prior to its adoption in the Maya area proper.”

Most of the photographs are excellent, but not all of them give a clear picture of what is present, or is supposed to be present. One gets the impression that in some cases a more complete photographic record could have been given by showing views of details, perhaps with night lighting, in addition to views of the whole monument. Considering the importance of the material, they might have been worth the cost in time and money. Of course it is not always possible to photograph

everything that can be made out when the monument is before one, and drawings must be used. Edwin G. Cassedy, of the Bureau, is credited with those for Tres Zapotes, and the eminent artist and archaeologist Miguel Covarrubias with those for Cerro de las Mesas.

Since the volume otherwise covers the Gulf coast sites fully, it seems regrettable that the famous Stela C at Tres Zapotes is not included, at least by illustration. For this one must turn to a special article by Stirling, published by the National Geographical Society (Stirling, 1940a in the bibliography).

There is some little data on architecture. Most mounds were entirely of earth. The little stone masonry uncovered appears to have been without lime mortar, and it is not well illustrated. There is a sketch map of the Tres Zapotes site, at small scale, and a map of the Isthmian region. An historical sketch of prior investigations at each of the sites precedes the description of its monuments. Results of reconnaissance in the Tres Zapotes region precede the conclusions for that site.

LINTON SATTERTHWAITE, JR.

UNIVERSITY MUSEUM  
PHILADELPHIA



## THE INTERNATIONAL ASSOCIATION FOR CLASSICAL ARCHAEOLOGY

ROME, 10th March 1945  
Via Omero 14

ARCHAEOLOGISTS and students of antiquity of ten different countries with a view toward common action after the war in all countries in the interests of the science of archaeology, have formed a provisional committee, to consider practical means to achieve such international collaboration. The result has been the formation of the International Association for Classical Archaeology. The aim has been to constitute a body which shall cut across national and political frontiers and answer to a real and practical spirit of co-operation; to effect co-ordination of the work of all archaeologists of goodwill and to provide a center of liaison for studies which shall have both the means and the authority to ensure a profitable future for its activities. Even if activity is limited to the rationalization of the scientific work of the archaeological institutes and libraries in Rome and to the organization of a center for consultation and information, a real contribution will be made toward the progress of archaeological science. Lack of means and difficulties of communication may preclude for a time more ambitious undertakings such as excavations and expensive publications.

Your adherence to this scheme is desired and it is hoped that you will be prepared to join in the undertaking as a future member of the Association. General comments, suggestions or criticisms of detail which will aid in the formulation of a definitive statute for the Association will be welcome.

### THE PROVISIONAL COMMITTEE FOR THE INTERNATIONAL ASSOCIATION OF CLASSICAL ARCHAEOLOGY

#### ADRIEN BRUHL

Former Member of the French School of Archaeology and History in Rome and of the High School of Hispanic Studies in Madrid.

#### FÉLIX DARSY

Professor of Archaeology at the Liturgical Dominican Institute in Rome.

#### LUC. DE BRUYNE

Professor at the Pontifical Institute of Christian Archaeology in Rome.

#### V. DE MARCO

Lecturer in Greek Literature at the R. University of Pavia.

#### ERNEST T. DE WALD

Professor of Art and Archaeology at the University of Princeton.

#### JACQUES HEURGON

Associate Professor at the Faculty of Letters of the University of Algiers.—Former Member of the French School of Archaeology and History in Rome.

#### SCARLAT LAMBRINO

Director of the Rumanian School at Rome.—Professor of Ancient History at the University of Bucharest.

#### H. M. R. LEOPOLD

Associate Professor of Italic Archaeology at the University of Leyden.—Former Director of the archaeological section of the Dutch Institute of Rome.

#### FILIPPO MAGI

Curator for Classical Archaeology in the Direction General of the Vatican Museums.

#### PAOLINO MINGAZZINI

Professor of Archaeology at the R. University of Genoa.

#### BARTOLOMEO NOGARA

Director General of the Pontifical Monuments, Museums and Galleries.

#### MASSIMO PALLOTTINO

Professor of Archaeology at the R. University of Cagliari.



**F. C. PFISTER**

Secretary of the provisional Committee for the International Association of Classical Archaeology.

**C. A. RALEGH RADFORD**

Fellow of the Society of Antiquaries.—Director of the British School at Rome.

**PIETRO ROMANELLI**

Inspector of the archaeological services at the Ministry of Public Instruction in Rome.—Associate Professor of Archaeology of Roman Africa at the R. University of Rome.

**ERIK SJÖQVIST**

Lecturer in Classical Archaeology at the University of

Stockholm.—Director of the Swedish Institute in Rome.—Chairman of the provisional Committee.

**A. W. VAN BUREN**

Professor of Archaeology in the American Academy in Rome.

**JOHN WARD PERKINS**

Fellow of the Society of Antiquaries.—Former Professor of Archaeology at the R. University of Malta.

**UMBERTO ZANOTTI BIANCO**

Director of the Society *Magna Graccia*.—President of the Society for Restoration of Monuments Damaged by the War—Rome.

## PROPOSED SCOPE AND FUNCTIONS

## I.

The International Association for Classical Archaeology is a body newly founded for the protection and furtherance of Greek and Roman Studies.

Its seat should be in Rome, the traditional home of such studies, where there are already a large number of museums, libraries and academic institutions of many nations. The participation of the latter will be essential for the effective work of the new Association.

## II.

The new Association will be a center for all who are interested in classical archaeology. Its purpose will be to develop scientific research, to assist study, and to protect the common classical heritage.

Insofar as its financial resources permit, it is suggested that it should undertake the following tasks:

1. The most pressing task concerns the archaeological Institutes already existing in Rome. These already constitute an international group within the field of archaeology and must be considered as the practical basis for the work of the Association. The Association will try, without in any way prejudicing the independence of the individual Institutes, to devise some means of rationalizing the book-purchases of their libraries in such a way as to avoid gaps and overlapping. It will encourage their specialization, and will in turn prepare and keep up to date a general catalogue of the book-purchases of the individual Institutes. It will further be prepared to arrange contacts between these Institutes and those countries which have no such facilities in Rome.

2. The new Association will undertake to bring into contact both individual students and archaeological institutions and other scientific bodies throughout the world. It should in fact provide its members with a thorough service of information and consultation. Not only will it foster correspondence between institutions and scholars, on the example of the former *Institut de Correspondence Archéologique*, but it should be in a position to supply on request all the bibliographical and museographical information, plans, and photographs available in its files and card-indices. Further, any member interested in some special line of study should be able to get from it full information as to recent discoveries and other relevant material.

3. The character of the Association's publications follows naturally on this service of information and documentation. It should devote itself at once to the publication of bulletins of recent archaeological and bibliographical information. Later it will be able to turn to the preparation of catalogues, *corpora*, indices, etc. It seems highly probable that after the war a number of countries will not be financially in a position to continue by themselves the publication of certain monumental editions of the first importance to scholars. Within this category fall certain large catalogues and archaeological *corpora*, and the definitive publication of certain outstanding classical sites and individual monuments. The new Association would be in a position to further the continued publication of such works under international arrangements, and to undertake the necessary co-ordination between the different countries and the national or international bodies concerned; or, if necessary, itself to assume the task of publication.



4. The new Association will, on a basis of international agreement, be concerned with the technical and financial organization of such archaeological undertakings as surveys, excavations, protection and conservation of monuments, and the publication of results. One of its essential functions will be to assist field-work and excavation to the limits permissible under the antiquities-laws of each country. This aspect of its work will not be allowed to prejudice the prior rights either of states or of scientific bodies, insofar as concerns the details of administration and the technical problems of research and of conservation. Such bodies as the archaeological missions of individual countries will in fact derive obvious advantage therefrom. It will be a question primarily of helping and of co-ordinating individual enterprises towards a common end, of giving financial assistance, and of making available specialist help from a source which could not possibly offend national susceptibilities.

Above all the new organization will be concerned to prevent fields of universal interest remaining indefinitely closed to archaeological science; and, as a corollary, to ensure that the results of surveys and of excavations do not, for whatever reason, remain too long unpublished. It will safeguard monuments of especial importance against destruction, damage, or dispersal.

5. The Association will have a special interest in all legislation governing archaeological research and the preservation of antiquities, applying to the field of classical archaeology the general principles established at the Cairo Congress of 1937, which was held under the auspices of the Department of Art and Archaeology of the International Institute of Intellectual Co-operation.

6. The Association will be in a position to further valuable international contacts between specialists in various fields by the organization of meetings and tours and of periodical congresses, undertaken in collaboration with other national and international bodies.

### III.

The new Association will be of a private character and will be financed primarily by contributions, gifts, and legacies, in addition to the yearly subscriptions of its members.\*

Its strength will have to lie in the results which it achieves, in the character of its undertakings, and in the repute of its members. Nevertheless a body, which is designed not only to undertake scientific work but itself to organize and protect science on an international scale, cannot rely solely on the moral authority of its members. Its pronouncements should not be those of private opinion but should express an agreed policy, whose weight would have such recognition that the national or international bodies to whom they were addressed would be obliged to give them serious consideration. As an international institution it is to be hoped that it would in due course receive help, or at any rate recognition, from the world-organization which it is believed and hoped will emerge after the present conflict.

### IV.

Membership of the Association will be open to all archaeologists and to all those interested in ancient studies, to all institutions of an archaeological character, and to all similar scientific bodies in all countries.

### V.

The control of the Association will be entrusted to a permanent Council composed of delegates to be selected by the nations represented therein. These delegates should be specialists in classical archaeology; and it is desirable that in their selection the directors of the national Institutes in Rome, insofar as they are qualified archaeologists, should receive prior consideration. The President of the Council will be elected in plenary session.

The administration of the institution will be entrusted to a director appointed by the permanent Council. He will also be secretary-general of the Council and of the plenary sessions. Subject to the development of the institution's activities, other secretaries can be appointed to administer the various branches of the work and to implement the decisions of the permanent Council.

In order to study proposals put forward in plenary session and to put into effect decisions taken therein, the permanent Council will be empowered to call special sessions and to nominate committees and commissions, whose work will be subject to the scrutiny of the next plenary session.

\* For the year 1945 the subscription of the individual members has been provisionally fixed at 10 shillings or at the corresponding value of the other countries calculated with the official exchange. For institutes the subscription is double.



The monograph entitled *THE SARCOPHAGI OF RAVENNA*, by Marion Lawrence (66 pp., 26 plates), will appear in September 1945. It is the second monograph \* published by the College Art Association of America in the series sponsored jointly by the Association and the Archaeological Institute of America. The price is \$2.50, with a special price to members of the Association and Institute of \$2.00 during the first year of publication. After September 1946 the price will be \$3.00 to non-members and \$2.50 to members of the two learned societies.

\* *THE FLABELLUM OF TOURNUS*, by L. E. A. Eitner (27 pp., 29 plates), appeared in the same series in 1944, and is still available at a price of \$2.00 to non-members and \$1.50 to members of the two learned societies.



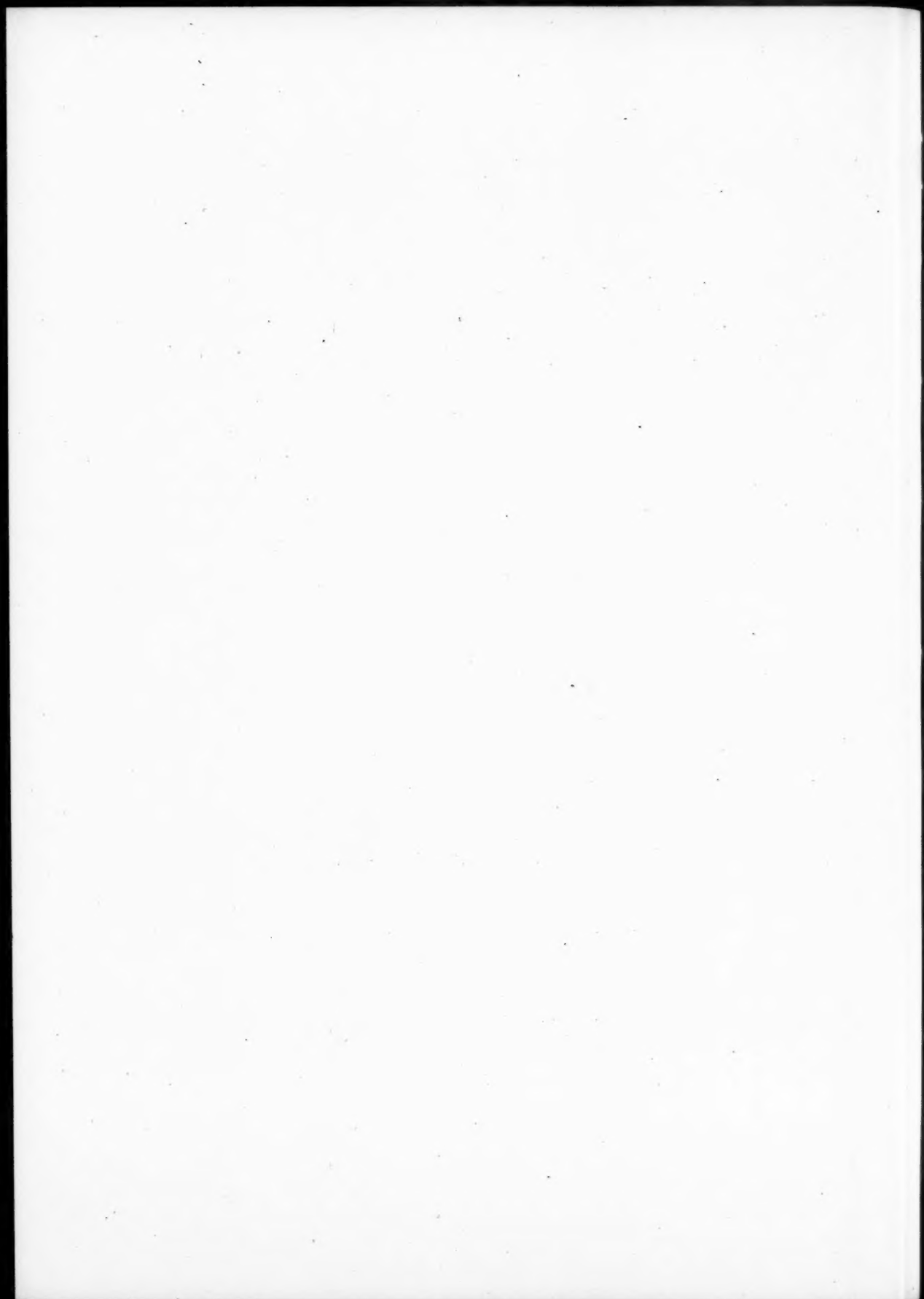




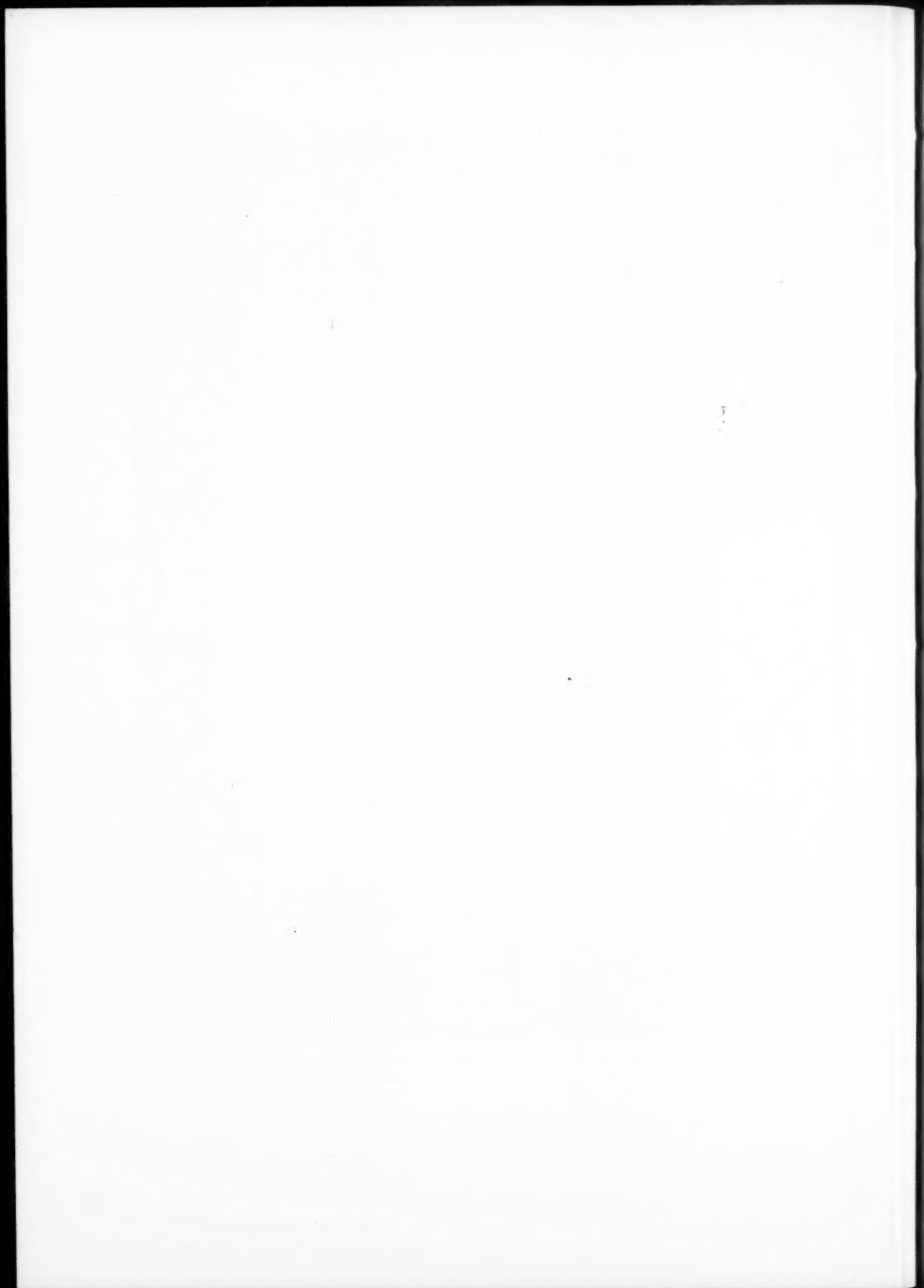


PLATE VIII. — DENARIUS OF M. AEMILIUS LEPIDUS, ENLARGED ABOUT  $1\frac{1}{2}$  DIAMETERS

(Alphabetical Designations run from Left to Right in Five Rows)

(a) British Museum; (b) W. R. Carpenter Coll.; (c) ANS; (d) Copenhagen; (e) Copenhagen; (f) West Baden College; (g) Yale University; (h) From Bahrfeldt, *Nachträge*, pl. 1, 8; (i-j) Columbia University; (k-l) ANS; (m) ANS; (n) Bern, Historisches Museum; (o) In the trade; (p) Smith College; (q) F. S. Knobloch Coll.; (r) University of Michigan; (s) R. W. Johnson Coll.; (t) Boston, Museum of Fine Arts







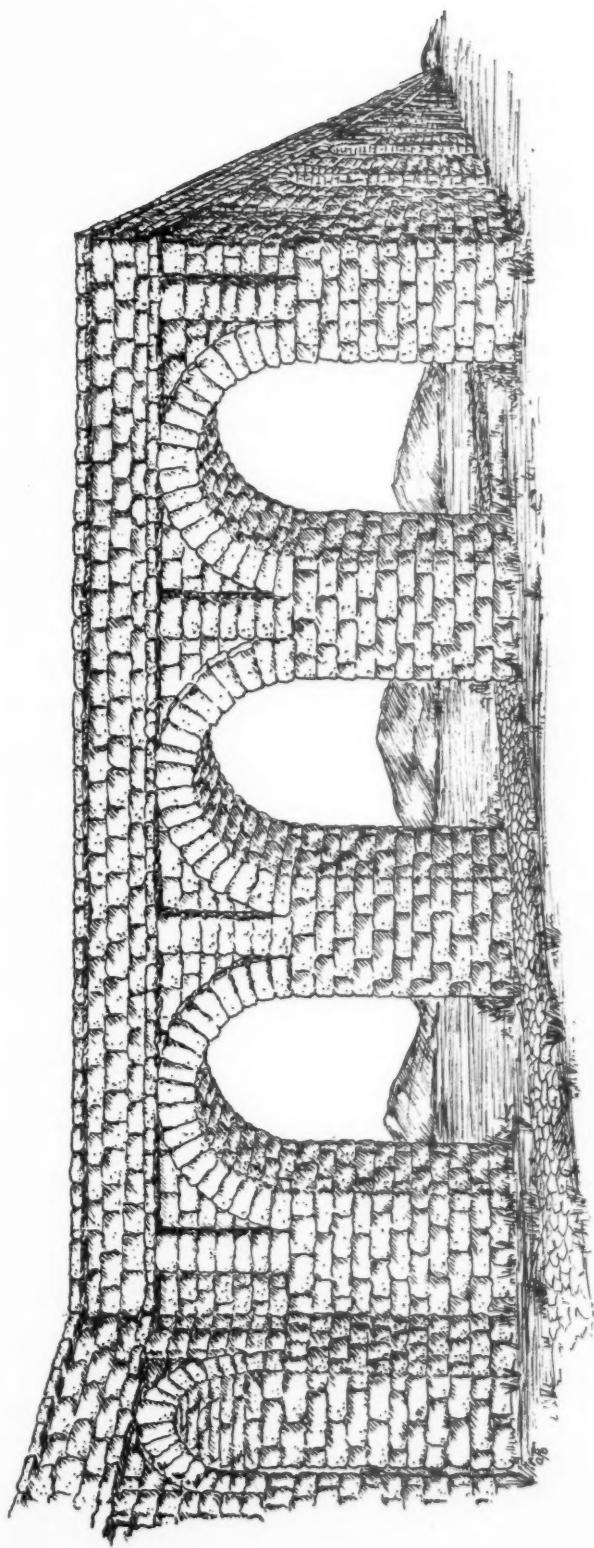


PLATE IX. — RECONSTRUCTION OF THE PRE-AUGUSTAN AQUA MARCIA WHERE IT CROSSED VIA PRAENESTINA  
(The Voussoirs Should Have Been Drawn in the Reconstruction as Flush with the Surface of the Spandrels)







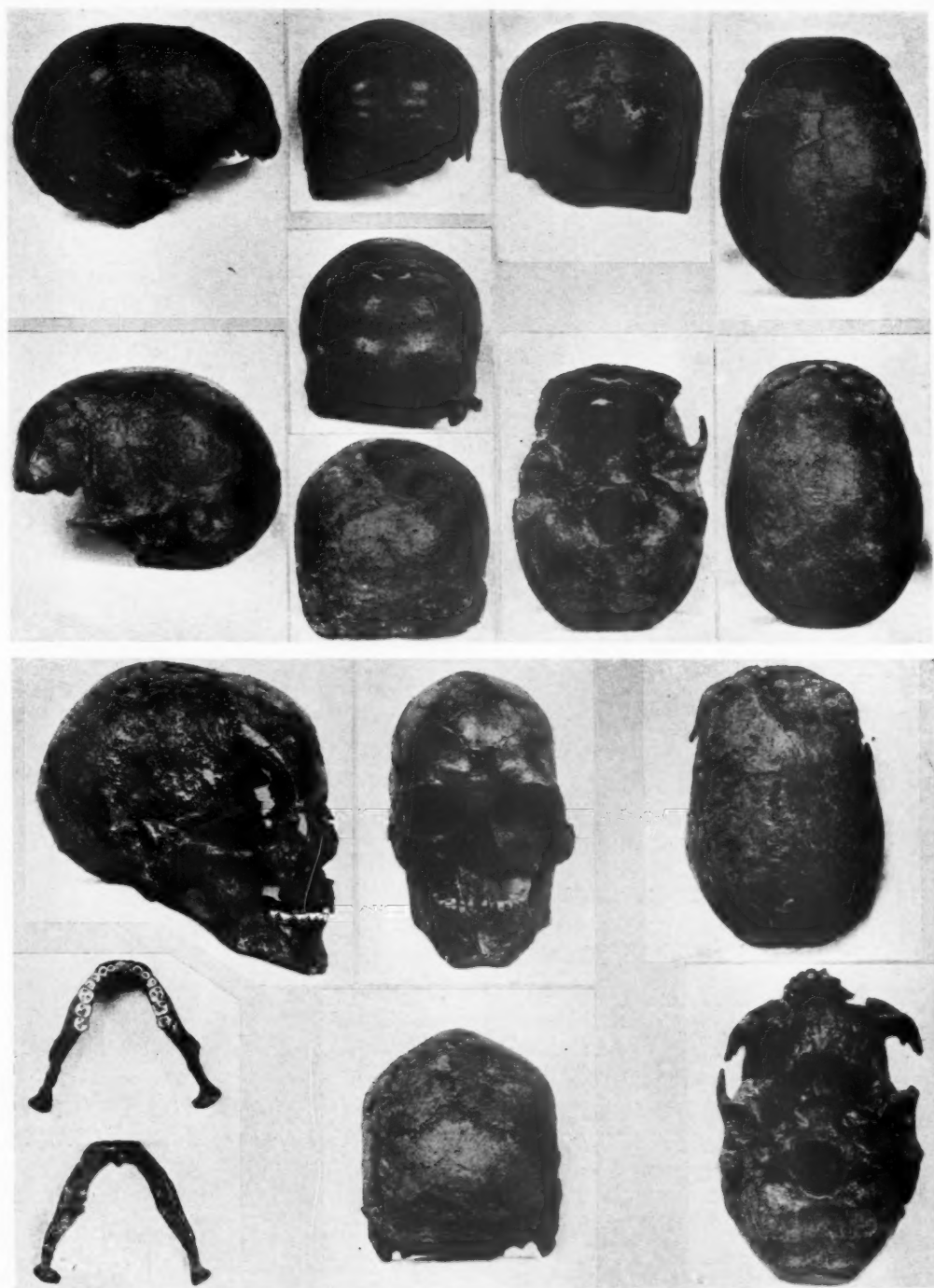
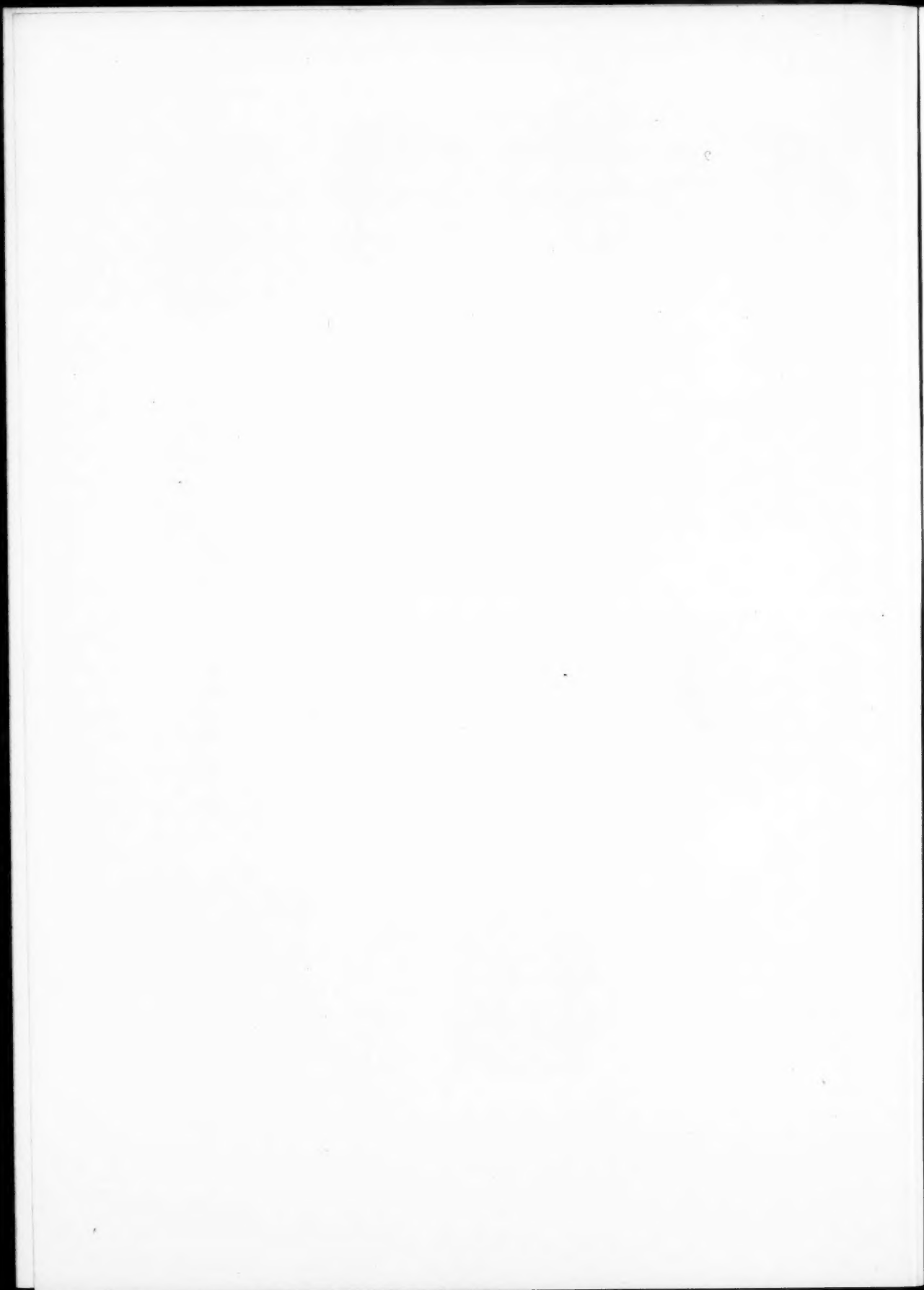


PLATE X.—*Upper Row: 1 Ast, MALE CALVARIA OF GRACILE MEDITERRANEAN TYPE FROM NEOLITHIC CAVE BURIAL NEAR ASTAKOS, ACARNANIA. Second Row: 2 Ast, MALE CALVARIA OF LINEAR MEDITERRANEAN TYPE FROM THE SAME SITE. Lower Row: 1 Hag, MALE CRANIUM OF BASIC WHITE TYPE, "MEGALITHIC" SUBGROUP, FROM NEOLITHIC SECONDARY CIST BURIAL IN THE HAGEORGITIKA MOUND, ARCADIA*







## CONTENTS

|   |     |
|---|-----|
| AMYX, D. A.—A New Pelike by the Geras Painter   | 508 |
| BIEBER, MARGARETE—A Late Roman Portrait Head of Alexander the Great<br>in Boston                | 425 |
| BONNER, CAMPBELL—Eros and the Wounded Lion  | 441 |
| BRENDEL, OTTO—Procession Personified  | 519 |
| BRONEER, OSCAR—Archaeology in Greece Today  | 416 |
| CARPENTER, RHYS—The Alphabet in Italy   | 452 |
| *CHASE, GEORGE H.—An Archaic Greek Sphinx in Boston   |     |
| *DINSMOOR, WILLIAM B.—The Athenian Treasury as Dated by its Ornament                            |     |
| *FRANKFORT, H.—Achaemenian Sculpture  |     |
| *GRACE, VIRGINIA—Early Thasian Stamped Amphoras   |     |
| HANFMANN, GEORGE M. A.—Horsemen from Sardis   | 570 |
| HILL, DOROTHY K.—Bonn or Colmar Painter?  | 503 |
| *HOLLAND, LEICESTER B.—The Triple Arch of Augustus  |     |
| IMMERWAHR, SARA ANDERSON—Three Mycenaean Vases from Cyprus in<br>the Metropolitan Museum of Art | 534 |
| *JASTROW, ELISABETH—Two Terracotta Reliefs in American Museums                                  |     |
| JOHNSON, FRANKLIN P.—The Late Vases of Hermonax   | 491 |
| *KAROZOU, SEMNI PAPASPYRIDIS—Choes  |     |
| LEHMANN, KARL—The Girl Beneath the Apple Tree   | 430 |
| *MATTEUCIG, GIACINTO—An Etruscan Mirror in Berkeley   |     |
| MILNE, MARJORIE J.—A Prize for Wool-Working   | 528 |
| MYLONAS, GEORGE E.—A Signet-Ring in the City Art Museum of Saint Louis                          | 557 |
| RAUBITSCHKE, ANTONY E.—The Priestess of Pandrosos   | 434 |
| *RICHTER, GISELA M. A.—Greeks in Persia   |     |
| ROBINSON, C. A. JR.—Alexander the Great and Parmenio  | 422 |
| ROBINSON, DAVID M.—A New Attic Onos or Epinetron  | 480 |
| ROSS, MARVIN CHAUNCEY—Fragment of a Consular Diptych  | 449 |
| ROWLAND, BENJAMIN, JR.—Gandhāra and Early Christian Art: Buddha<br>Palliatius                   | 445 |
| *SCRANTON, ROBERT—Interior Design of Greek Temples  |     |
| *SIMKHOVITCH, V. E.—Some Fifth-Century Greek Heads  |     |
| SMITH, H. R. W.—From Farthest West  | 465 |
| TALCOTT, LUCY—Note on a Festival Jug  | 526 |
| VANDERPOOL, EUGENE—An Unusual Black-Figured Cup   | 436 |

\*The articles of the authors who are starred will appear in the JOURNAL, in March, 1946, in the second half of the Beazley Honorary number.



|  |     |
|--|-----|
| VERDIANI, CARLO—Original Hellenistic Paintings in a Thracian Tomb (excerpted from the Italian by Rhys Carpenter) | 402 |
| Archaeological Notes   | 402 |
| News and Discussions—Stephen B. Luce   | 582 |
| Necrology  | 582 |
| General and Miscellaneous  | 585 |
| Egypt  | 587 |
| Mesopotamia  | 587 |
| Palestine and Syria  | 588 |
| Greece   | 589 |
| Rome   | 594 |
| Roman Britain  | 595 |
| Early Christian and Byzantine  | 595 |
| Mediaeval  | 596 |
| Renaissance  | 597 |
| America  | 598 |
| Far East   | 598 |
| U.S.S.R.   | 599 |
| Book Reviews   | 600 |



## *List of Subscribers*

TO THE DECEMBER ISSUE OF THE *AJA.*,  
VOLUME XLIX, 1945

*Published in Honor of the Sixtieth Birthday of*

J. D. BEAZLEY

---

|                               |                             |
|-------------------------------|-----------------------------|
| ALEXANDER, CHRISTINE          | LUCE, STEPHEN B.            |
| AMYX, D. A.                   | MARQUAND, MRS. ALLAN        |
| BLEGEN, MRS. CARL W.          | MATTEUCIG, GIACINTO         |
| BREWSTER, ETHEL H.            | McCOWN, CHESTER C.          |
| CAMPBELL, BONNER              | MERRITT, BENJAMIN D.        |
| CANADAY, MR. AND MRS. WARD M. | MILNE, MARJORIE J.          |
| CARPENTER, AGNES MILES        | MOORE, MRS. WILLIAM H.      |
| CARPENTER, RHYS               | MYLONAS, GEORGE E.          |
| CHASE, GEORGE H.              | NOCK, ARTHUR DARBY          |
| CLEMENT, PAUL A.              | RAUBITSCHKE, ANTONY E.      |
| CONANT, KENNETH G.            | RICHTER, GISELA M. A.       |
| CRANE, MRS. W. MURRAY         | ROBINSON, C. ALEXANDER, JR. |
| DAY, JOHN                     | ROBINSON, DAVID M.          |
| DINSMOOR, WILLIAM B.          | ROEBUCK, CARL               |
| DOW, STERLING                 | ROSTOVITZ, MICHAEL I.       |
| DUELL, PRENTICE               | SACHS, PAUL J.              |
| DUNHAM, DOWS                  | SANBORN, ASHTON ROLLINS     |
| GALLATIN, ALBERT              | SCRANTON, ROBERT            |
| GOLDMAN, HETTY                | SEARLS, HELEN E.            |
| GRACE, VIRGINIA               | SHOE, LUCY T.               |
| HANFMANN, GEORGE M. A.        | SHEAR, MRS. T. LESLIE       |
| HANSEN, HAZEL D.              | SHERO, L. R.                |
| HAUSER, WALTER                | SIMKHOVITCH, VLADIMIR G.    |
| HILL, MR. AND MRS. BERT H.    | SMITH, H. R. W.             |
| HOPKINS, CLARK                | STUART, MERIWETHER          |
| HUNT, MRS. HAMLIN             | SWINDLER, MARY H.           |
| IMMERWAHR, SARA A.            | TALCOTT, LUCY               |
| JASTROW, ELISABETH            | TAYLOR, LILY ROSS           |
| KOYL, GEORGE S.               | WALLACE, WILLIAM            |
| LEHMANN, KARL                 | WEEKS, CARL                 |
| LIVINGOOD, CHARLES J.         | WEINBERG, SAUL              |
| LORD, LOUIS E.                | WILLIAMS, PHYLLIS           |



## ARCHAEOLOGICAL NOTES

### ORIGINAL HELLENISTIC PAINTINGS IN A THRACIAN TOMB \*

(Preliminary Report)

*Excerpted from the Italian by Rhys Carpenter*

MODERN scientific investigation of the Balkan area, particularly in the territory comprised in present-day Bulgaria, once part of the Roman provinces of Moesia and Thrace, seems to have been chiefly occupied with the prehistoric field. The fruitful explorations of the American School of Prehistoric Research and subsequent German excavations may seem to have justified such a preference; but the truth is that, in spite of such specifically Thracian studies as those of Dumont, Seure, and Geza Feher, we have failed to appreciate the potentialities of this area as a source of classical archaeological material. In the course of the excavations of the Italian Archaeological Mission at Moesian Oescus (Ghigen) under the direction of Antonio Frova, in which I participated, we had an opportunity through various exploratory side-trips of gaining some idea of the enormous mass of material still awaiting scholarly investigation.<sup>1</sup>

Twice during the last three years, Bulgaria (assisted by Tyche) has brought to light treasure of the highest archaeological interest. In 1942 a chance discovery at Silistra, the Roman Durostorum, disclosed a tomb with walls adorned with painted figures, a monument of exceptional interest with which I intend to deal in another place.<sup>2</sup> And again in 1944 a second tomb came to light at Ksanlik with paintings of still more sensational importance. It is this latter which is the subject of the present communication. The two tombs raise problems of wholly different significance for the study of ancient painting, since the Silistra tomb must be as late as the fourth century of our era while the Ksanlik tomb belongs to the Hellenistic period; but both are alike in their almost perfect preservation, with brilliant colors and clear outlines—a circumstance all the more calculated to enhance their value and bring out the diversity of their archaeological interest.

The Ksanlik tomb (discovered on April 19, 1944) is under study by Bulgarian archaeologists, who were its first modern scholarly visitors. To date, only a brief announcement of the find has been made in the local press<sup>3</sup> by Nikola Mavrodinov, the present director of the museum at Sofia. I intend therefore to confine myself to a bare description of the tomb and its paintings without venturing on further comment until the whole material has been fully published and studied in all its detail. I should add that, on specific order from higher Bulgarian authorities, I was not permitted during my two brief visits to the tomb to take either notes or measure-

\* The JOURNAL is indebted to Professor C. R. Morey of the Foreign Service, U.S.A., for this article.

<sup>1</sup> A. Frova, *Lo Scavo della Missione Archeologica Italiana in Bulgaria ad Oescus*, Rome, 1943 (Relazione preliminare).

<sup>2</sup> See A. Frova, *Pittura romana in Bulgaria*, Rome, 1944 (published before the discovery of the Ksanlik tomb), and C. Verdiani, *L'Ipogeo di Durostorum e pitture decorative nelle provincie orientali dell' Impero Romano* (in course of publication).

<sup>3</sup> In *Iskra* for August 31, 1944 (in Bulgarian).



ments. The photographic illustrations were obtained through a private source. In consequence I have felt compelled to omit certain details on the nuances of the colors where there was any risk of inaccuracy through slip of memory, since I have felt it incumbent in such a report that nothing should be included for which I could not vouch completely.

\* \* \* \* \*

While digging a shelter under an anti-aircraft observation post on a hillock close to the settlement of Kasanlik, at a depth of a few meters under the surface, soldiers came upon the outer doorway, facing south. Two parallel walls, which were part of the original structure and still showed traces of stucco, flanked the approach. The opening, of normal human height, was found closed by a slab of unusual thickness. On removal, this gave access to a narrow covered corridor, or dromos, rather more than two metres long, wide enough for ordinary human passage, and leading to the entrance to the tomb proper (fig. 1). This proved to be a tholos with a diameter of 2.60 m. and a height of about 3.00 m. to the center of its vault. The tomb had been violated and its contents removed at some undetermined period, presumably during the barbarian invasions. However, there were still discoverable, outside the outer doorway, remains of bones of horses buried at the same time as their master and, within the tomb, traces of human bones (of both sexes), a clay amphora of ordinary fabric, gold threads from the stolen burial raiments, some tiny gold discs from a woman's necklace, and some exquisitely delicate bright-blue rosettes, likewise from the vanished raiment.

Imbedded in the wall were three bronze hooks from which some heavy ornaments must once have been suspended. Metal hinges on the inside of the door-frame testified to the existence of a swinging door only about two feet high, probably of bronze, which had been torn off and removed. As the exterior of the structure had not yet been laid bare at the time of my visits and the interior was everywhere hidden under a thick coat of plaster, I was unable to ascertain any details of the method of construction. The conical profile of the dome is typically Thracian. It is not carried on any base or drum, but rests directly on its foundations in the ground, whence it rises contracting steadily.

The tomb must have belonged to a rich family, to judge from the surviving traces of the burial and the magnificent painted decoration which completely fills it, presenting to the astounded modern visitor a harmonious conception in color and form, our first authentic example of Hellenistic mural painting! The designs in the tholos, at least, are due to a painter of excellent school with sound traditional connections.

The medium is fresco (which may excuse certain slight inaccuracies due to the need for speed in working on a wet ground). The colors employed are blue (used rather consistently for glass and metal), cinnabar red, sienna, a warm yellow, and a rose red. The shadows tend at times toward purple, at other times toward grey. There is no indication of landscape or other background. In corridor and vault together, the human figures have been estimated to number thirty-five, the horses thirty.

The decorative sequence from floor to ceiling is everywhere the same, viz., a





FIG. 1—TOMB AT KASANLIK, THE DROMOS AND ENTRANCE TO THE FUNERARY CHAMBER

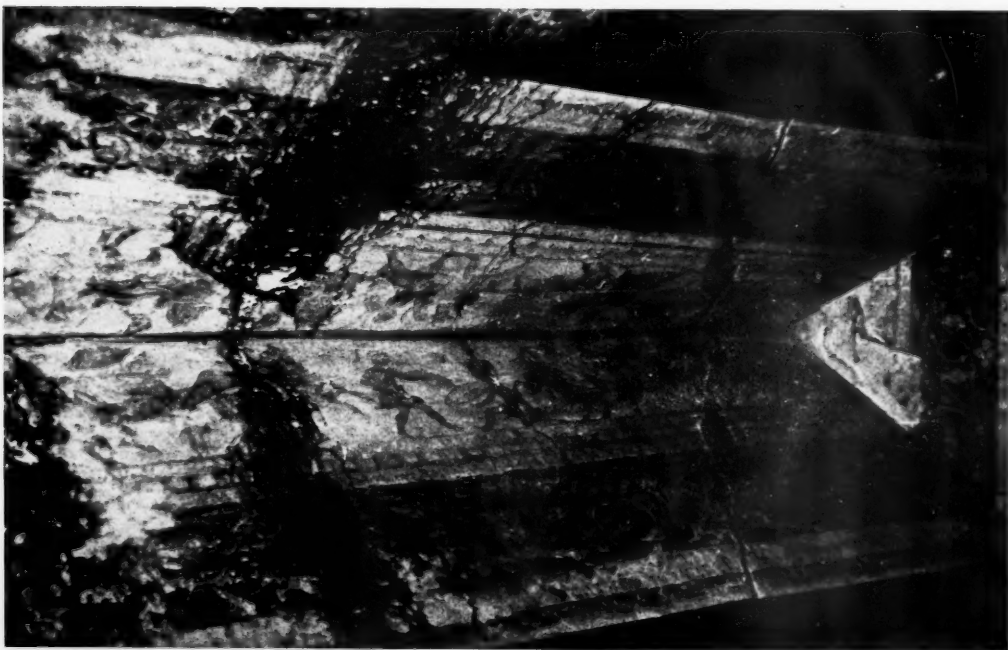


FIG. 2—TOMB AT KASANLIK. THE GABLE ROOF OF THE DROMOS AND DECORATIVE FRIEZE



black dado, followed by a zone of white rectangles carefully edged with fine rose-red borders; next, a projecting black band; and finally the main area in bright cinnabar extending up to the crowning ornamental course, which is painted in imitation of an architrave of the Ionic Order and supports the frieze of figure-painting.

In the dromos the soffit of the long narrow gable-roof is entirely covered with decorative motives arranged in four bands (fig. 2). The first of these shows slight and rather hastily executed mouldings painted on a light ground, setting off the second and broader band, which is filled with the twining tendrils of an interlacing grape-vine motive. But it is the highest band close under the peak of the gable which most attracts attention with its minute figures (some 20 to 25 cm. high) of warriors fighting on foot and on horse (figs. 3, 4). Groups of horsemen on rearing steeds are preceded by foot-soldiers and move from both sides toward the center of the composition (figs. 5, 6). Costumes are local Thracian with un-Hellenic close-fitting trousers (?) and barbarian cut of shoes and head-dresses. These are characteristic of the figures in the dromos only (which, it should be noted, are in a highly precarious state of preservation owing to the extensive infiltration of damp). The draughtsmanship also is very different from that displayed in the tholos, substituting for the lofty style and traditional manner there apparent an impetuosity and freedom of line which makes some of the steeds in their powerful foreshortening suggest almost a Paolo Uccello. There is a feeling of solidity in the animals, of spontaneity and immediateness in the human action and poses. The contours are much more emphatic than in the tholos paintings, and there is less use of color-wash to indicate shadow and produce modelling. An interesting comparison could be made with battle scenes in the later and much cruder Kertch paintings, particularly those in the "1872 Tomb" (so designated from its year of discovery) reproduced and studied by Rostovtzeff.<sup>4</sup>

As we cross the threshold which separates dromos from tholos, there is a total change of feeling and effect. On the walls from ground to vault there still ranges the same succession of decorated zones and rectangles already described; but their movement around an endless circle endows them with more seemingly structural solidity, and the chief zone of brilliant cinnabar appears to support and carry suspended the dome with its luminous colors. Here, as in the dromos, the ceiling decoration is distributed over four bands or zones; but again the movement in a circle, which converts them into concentric rings of diminishing diameter, produces a new effect of receding perspective (fig. 7). Below and closer at hand are the dead seated at their funeral banquet and attended by their retainers; above and more distant are racing chariots.

The outermost or lowest ring enriches the Ionic architrave of the dromos by adding bucrania in white tied with pink fillets, evenly spaced between four-petalled rosettes. These latter are unique in that their two blue petals (which alternate with two rose-red ones) are not colored in paint but inlaid with a finely ground blue glass paste held securely in a cut-out frame. Wherever it occurs in these tholos paintings, bright blue is rendered in this same remarkable technique, for which I know no ancient parallel.

<sup>4</sup> *Ancient Decorative Painting in Southern Russia*, St. Petersburg, 1913 (in Russian).





FIG. 3—TOMB AT KASANLIK. PART OF THE DECORATIVE FRIEZE IN THE DROMOS. COMBAT OF WARRIORS



FIG. 4—TOMB AT KASANLIK. PART OF THE DECORATIVE FRIEZE IN THE DROMOS. BATTLE BETWEEN WARRIORS





FIG. 5—TOMB AT KASILIK. PART OF THE DECORATIVE FRIEZE OF THE DROMOS, HORSEMEN

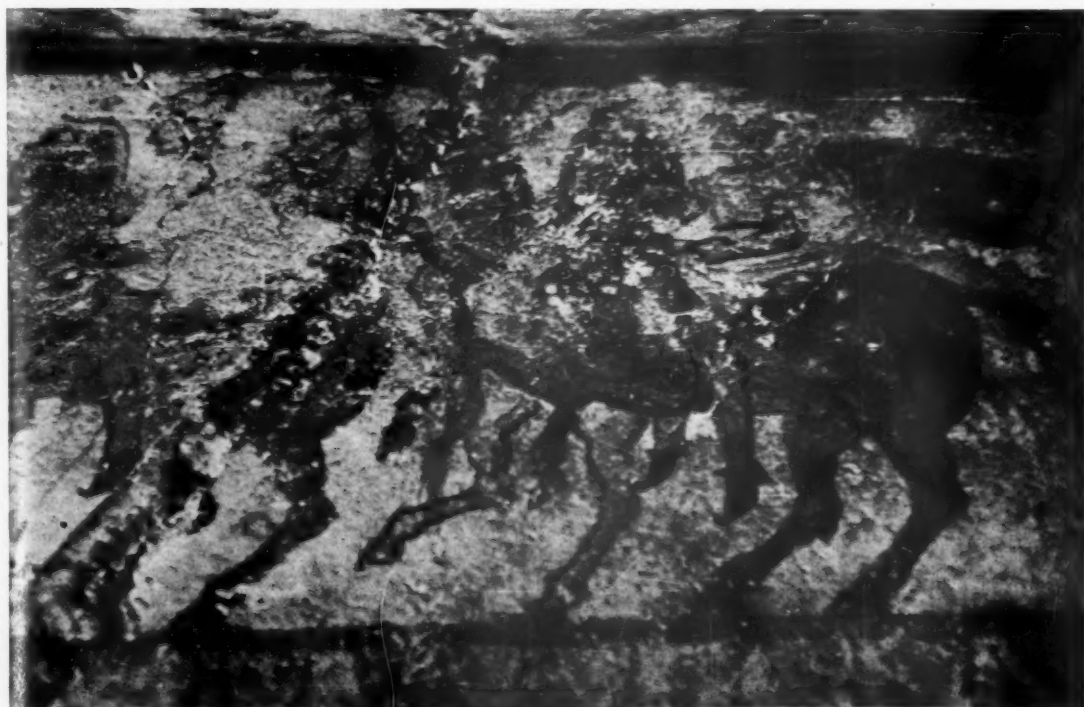


FIG. 6—TOMB AT KASILIK. PART OF THE DECORATIVE FRIEZE OF THE DROMOS, HORSEMEN



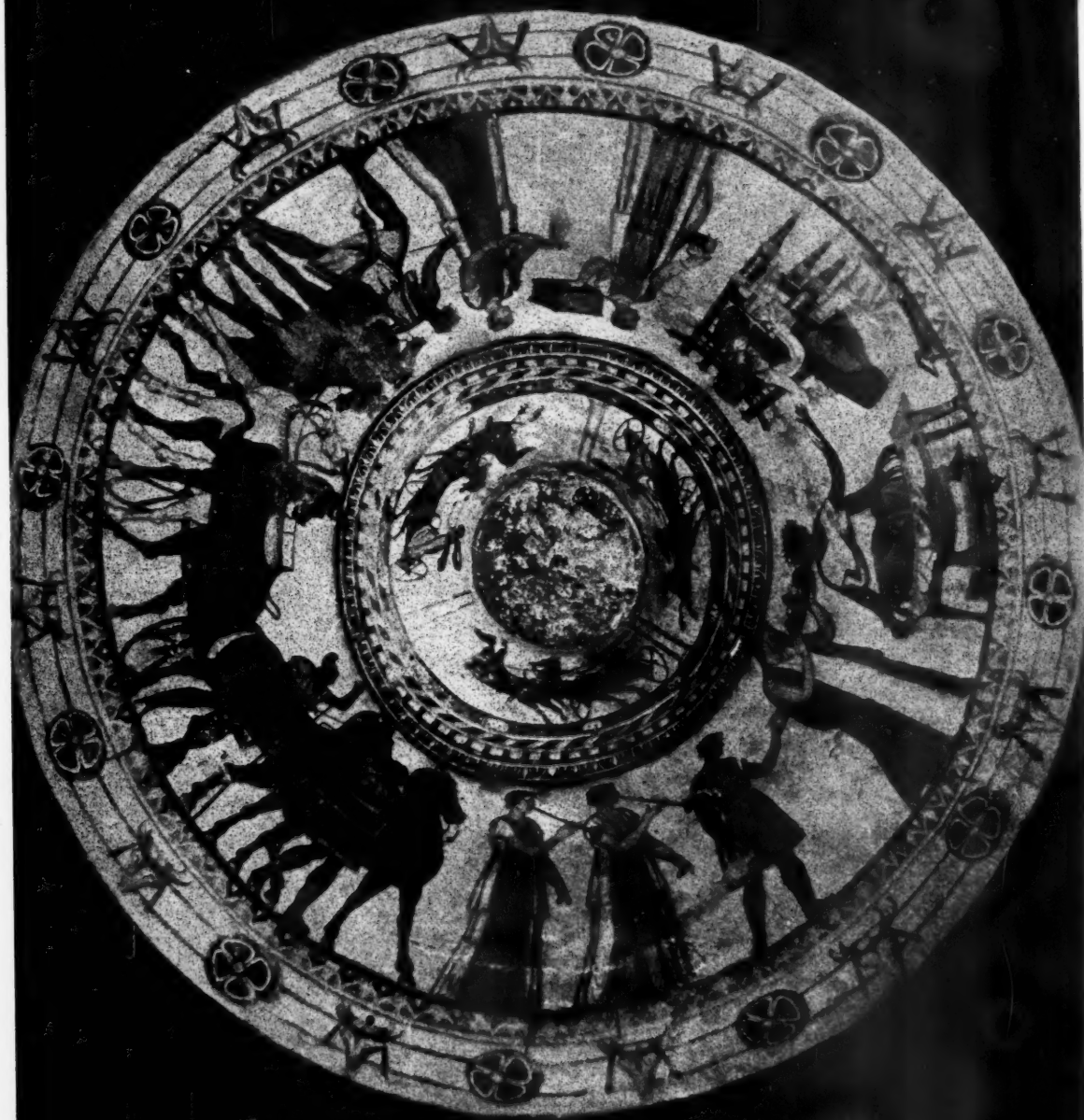


FIG. 7. MOSAIC AT KANASTOTA. VIEW OF THE COMPLETE DECORATION OF THE TIGLON WITH THE SCENE OF THE FUNERAL BANQUET, THE SERVANTS AND THE CHARIOT RACE



Next comes the main frieze of painted figures, some 60 cm. high, with its unprecedentedly imposing presentation of a theme extremely popular in the Balkan region and constantly repeated in more and more barbarously brutalized versions down to the fourth and even the fifth centuries after Christ (fig. 8). Usually in such scenes the man is shown reclining on a couch while the woman is seated, and attendance is limited to a diminutive servant who holds a flask (*lagena*) in one hand and a folded napkin (*mappa*) over the other arm. But here at Kasanlik the scene unfolds itself in stately ceremonial far surpassing anything to be found elsewhere, such as the frescoes of the Via dei Cerchi at Rome from the third century after Christ or the even later version in the Silistra tomb mentioned at the beginning of this article.

Opposite the doorway from the dromos and therefore facing an entrant in the tholos, the dead pair are seated side by side (fig. 9). The master sits on a cushioned seat or rectangular stool upholstered in red and white striped material over finely turned spindles, while his lady is enthroned on an elaborate high-backed chair with elegantly carved sphinxes supporting the arm-rests. Both wear footgear and set their feet on footstools with dark red borders. The woman wears a white sleeveless undergarment beneath a yellow himation with dark folds, while the man has a short-sleeved white tunic with a pink outer-garment showing rather stiff and heavy folds across his lap.

A low rectangular table with only three legs (perhaps inherited from the three-legged round table of normal tradition) tilts its top in false perspective to display a collection of viands, among which bread, fruit, and a knife are readily identifiable.

The man's countenance, scarcely distinguishable in our not too successful enlargement, appears to possess portrait traits. His head is wreathed, perhaps with laurel. He holds a bowl or dish in his right hand and extends his left toward his companion, who rests her right hand upon his wrist. Her other hand, held close beneath her chin, protrudes from the edge of her himation, which she has drawn



FIG. 8—STELE OF CORNELIUS FROM ISTRIA WITH LATE SCENE OF A FUNERAL BANQUET AND THE DECORATIVE MOTIVE OF THE VINE





FIG. 9 — TOMB AT KARANLIK. PART OF THE GREAT FRIEZE OF THE THOLOS: THE DEAD PAIR



FIG. 9.—TOMB AT KASANLIK. PART OF THE GREAT FRIEZE OF THE THOLOS: THE DEAD PAIR

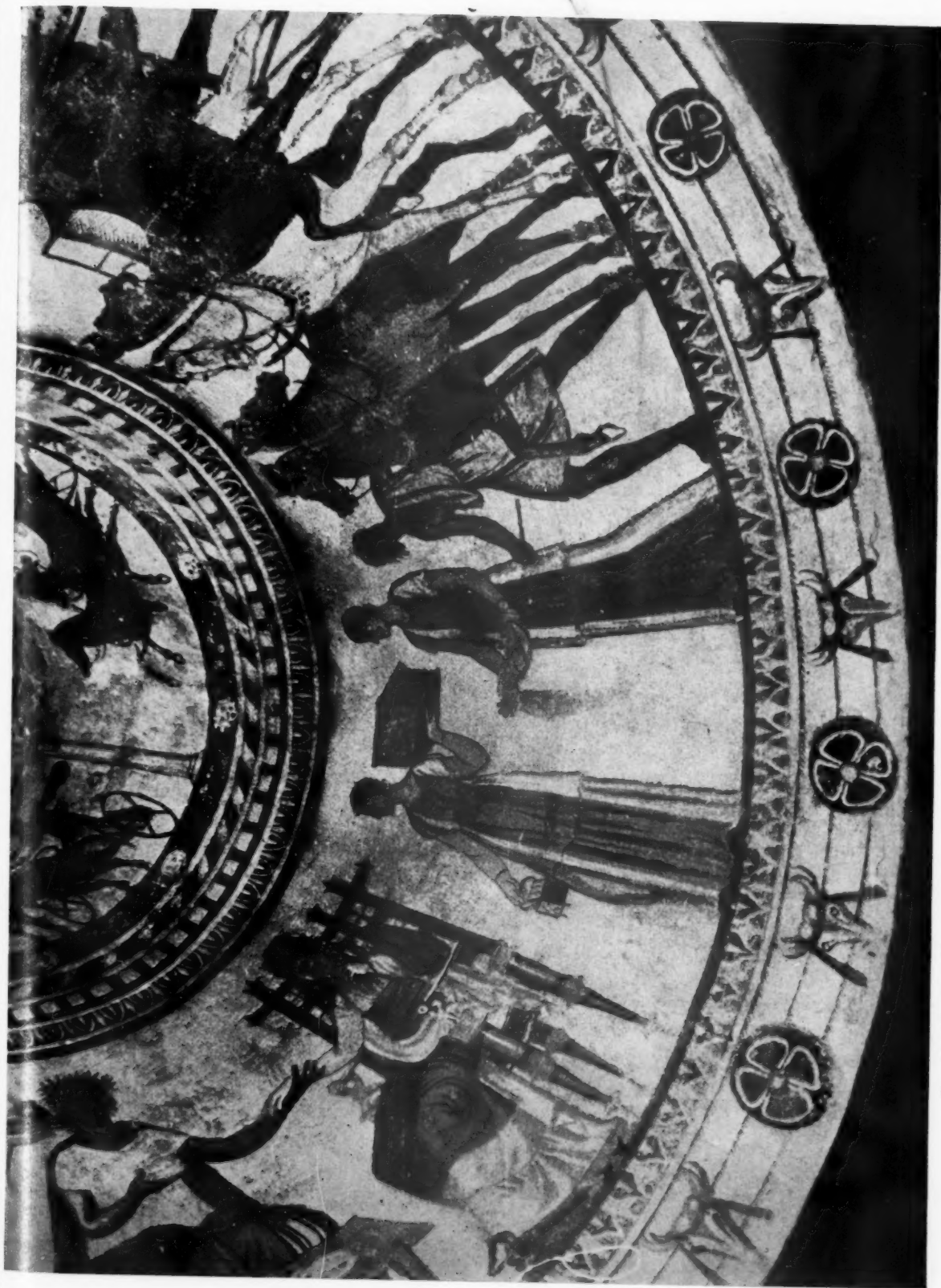


FIG. 10.—TOMB AT KASANLIK. PART OF THE GREAT FRIEZE OF THE THOLOS: MAIDSERVANTS, MANSERVANT, QUADRIGA



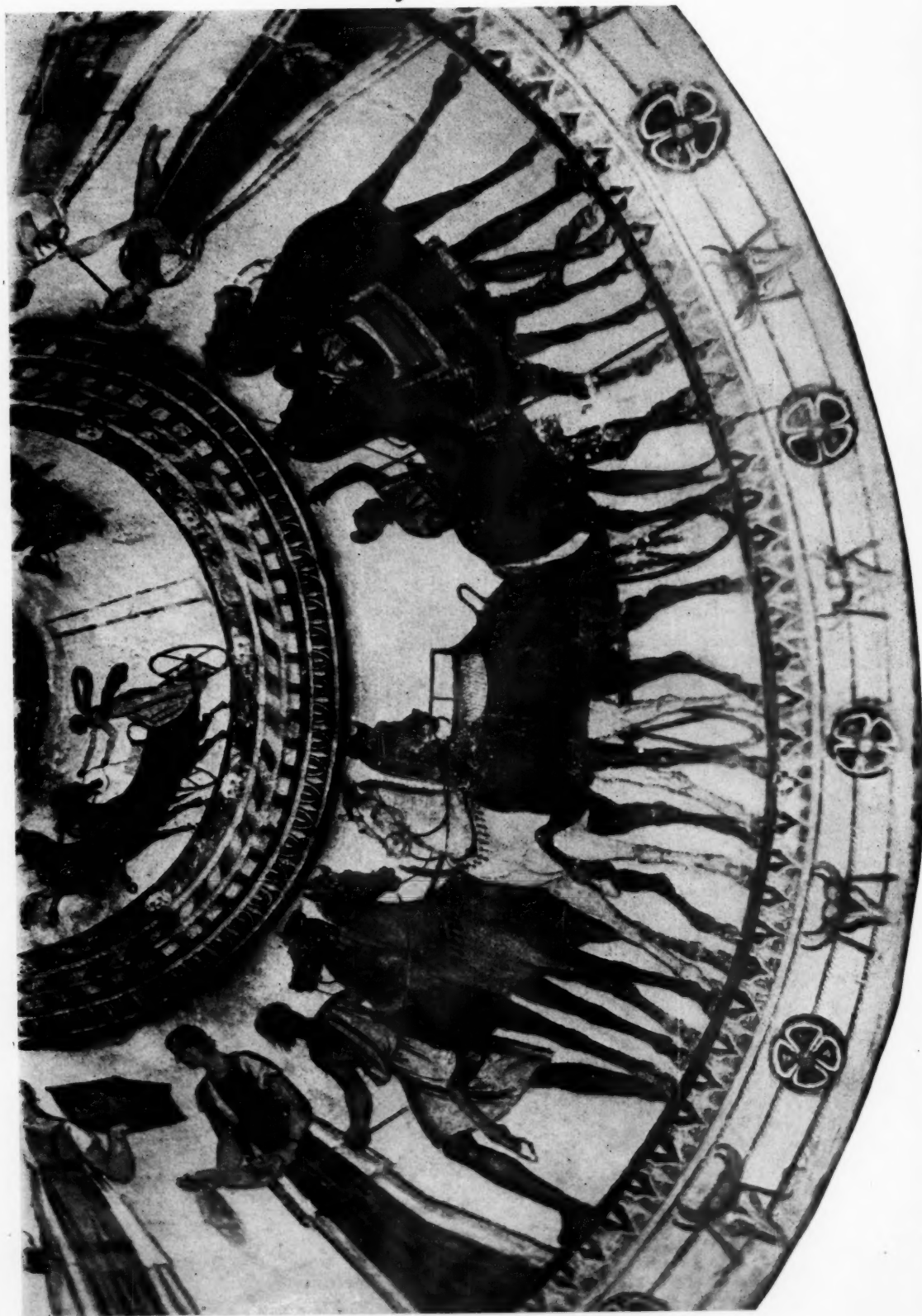


FIG. 11 — TOMB AT KASANLIK. PART OF THE GREAT FRIEZE OF THE THOLOS: SERVANTS, QUADRIGA, HORSEMEN



FIG. 11.—TOMB AT KASANLIK. PART OF THE GREAT FRIEZE OF THE THOLOS: SERVANTS, QUADRIGA, HORSEMEN

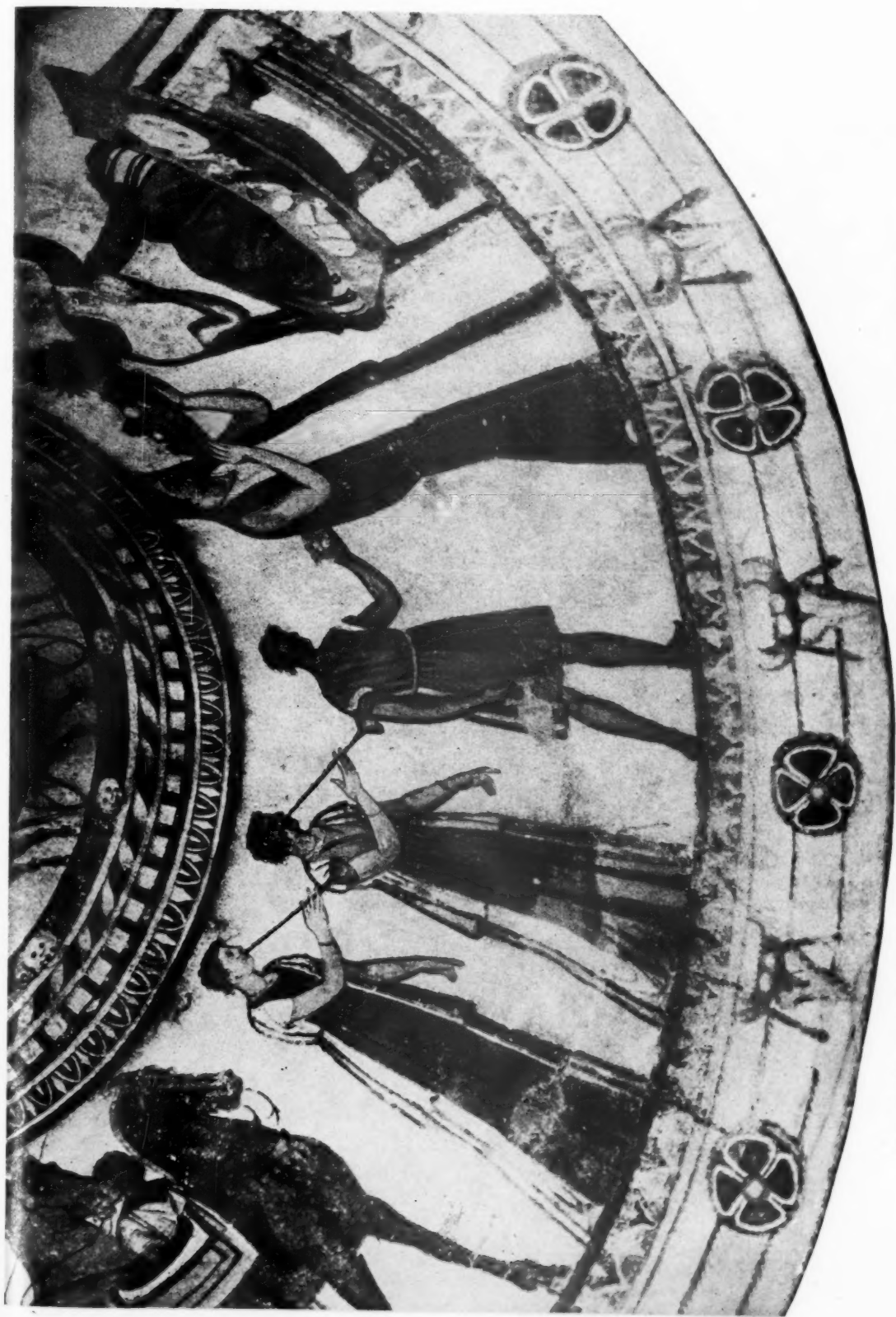


FIG. 12.—TOMB AT KASANLIK. PART OF THE GREAT FRIEZE OF THE THOLOS: FLUTEPLAYERS, SERVANT, AND A SYMBOLIC FIGURE





FIG. 13—TOMB AT KASILIK. INNER RING OF THE CIRCULAR SECTION OF THE THOLOS: CHARIOT RACE



veil-like over the back of her beribboned hair. The features of her face are finely drawn, and their expression is one of thoughtfulness verging on sorrow.

From left and right on either side of these two chief figures converge attendants in a two-fold procession which has its origin diametrically across the circle, directly above the entrance to the tholos. Behind the woman there approaches from the right a handmaid in high-girt trailing garment with overfold; she carries a tray or large square box (of toilet articles) on her raised left hand and a small jewel-box in her lowered right (fig. 10). Behind her, a second serving-woman follows with the *mappa* in her outstretched hands (compare the fresco from the Via dei Cerchi). Next, and last, a male attendant leads an elegant team of four lively horses (three bays and one white), hitched to a light car. Therewith we have reached (fig. 11) the point at which the other branch of the procession diverges, moving in the opposite direction and comprising two men busy with a pair of spirited riding-horses with saddle-blankets, two female musicians, one garbed in red and white, the other in white and pale yellow (fig. 12), moving in identical rhythm, preceded by a male servant in short girt tunic, holding *patera* and *lagena*, and finally, close to the master at his table, an abnormally tall and rather mysteriously stately figure of a woman dressed in white and red, bringing a tray of fruit.

Above this principal frieze the concentric circles draw together toward the central crown of the dome—first, a cluster of four decorative string-courses (egg-and-dart, Doric hawkbeak leaf, cable, and lion's-head sima); then, a zone in light ground against which a trio of two-horse racing-cars with eager drivers gallops toward as many goal-posts in endless headlong pursuit around the circle (fig. 13). A central heavy boss closes the vault and terminates the pictorial composition.

Such is this magnificent new discovery, of which it is not an exaggeration to say that in the realm of ancient painting it supplies the most important new document since Dura-Europus. Hitherto in the eastern provinces we have been confronted with a Greek tradition so heavily obscured by local manner and un-Hellenic influences that it was impossible to disengage the uncontaminated Hellenistic inspiration behind it. Further, such paintings as there were—the tomb at Pydna in Macedonia with its architectural motives and rich range of colors,<sup>5</sup> the tomb at Niausta, also in Macedonia,<sup>6</sup> the Kertch tombs published by Rostovtzeff<sup>7</sup>—were only too frequently not merely of late date but in less than indifferent state of preservation. Here at Kasanlik we are at last granted not a shadowy and uncertain glimpse, but a clear view of genuine Hellenistic painting in wonderfully perfect condition! We can only offer our congratulations to our Bulgarian archaeological colleagues and express the heartfelt hope that they will hasten to give us the official publication of this marvellous tomb in all its detail and in all its radiant color.

CARLO VERDIANI

<sup>5</sup> L. Heuzey et Daumet, *Mission archéologique de Macédoine*, Paris, 1876. Pp. 239–266.

<sup>6</sup> K. F. Kinch, *Le tombeau de Niausta*; Raekke, *Historiski og Filosofisk*, Afd. iv, 3, Copenhagen, 1920.

<sup>7</sup> M. Rostovtzeff, *op. cit.*



## ARCHAEOLOGY IN GREECE TODAY

ON A visit to Greece in the month of May in the interests of the Greek War Relief Association I had occasion to visit a number of the archaeological sites and to speak to some of the classical scholars in Greece, both Greek and American. The following notes on my observations may be of interest to the readers of the *American Journal of Archaeology*:

### OLYMPIA

The modern village suffered some damage during the civil strife that followed the liberation of the country. We had difficulty finding food and lodgings in the town. Water and electricity had been cut off. Mr. Cosmopoulos, the affable owner of the little Hotel Olympia, as well as of the Hotel de Chemin de Fer, had died a few days before our arrival. The small hotel was occupied by private families, and the larger one had to be opened specially for our arrival. During the revolution, it was used for a while as a hospital and much of the equipment had been carried off by the belligerents.

The museum was closed and the epimelites had gone to Athens, taking the key with him. We were told that there was little to see since all the important sculptures were still covered with sandbags. The excavations, so far as could be learned from a brief visit, had escaped without damage. We were informed that none of the antiquities had been carried off.

### CORINTH

The two buildings of the School carried somewhat amusing marks of the occupation in the form of wall paintings and mottoes in German, applied by the officers who had occupied the buildings. There was no serious damage to the property beyond a general dilapidation from lack of necessary repairs. The departure of the Germans brought new denizens to the premises. The west house is now partially inhabited by a colony of silk worms tenderly cared for by Thanase, the chauffeur. He must be given credit for remaining at his post during the trying years of occupation and preventing further damage to the buildings.

There are no visible signs of flagrant destruction in the excavations, but weeds and even small shrubs and trees have grown up among the ruins, giving them a neglected appearance. At small expense, and with very little supervision, the excavation can be made to look as well and orderly as before. George Kachros, the faithful guard of the museum, is still on duty keeping the antiquities from harm. But here, as in Athens, the fences are down and at our visit a flock of turkeys, herded by a boy in rags, disported themselves among the ancient marbles in the agora.

The workmen who used to get their cash earnings by working for the School during the excavation season in the spring looked harrowingly poor and ragged. In the village square they surrounded our vehicle, asking when I would come back to resume the work in the excavations. During a second visit we distributed some Greek War Relief Association clothing among the poor, but since all had been unable to obtain any clothing during the past five years, the amount available was not sufficient to meet the need.



## CRETE

In Crete I saw the new museum which houses the fragile frescoes from the palace of Knossos. Although the city suffered severe damage during the bombardments early in the war, there are only superficial scars on the exterior, and I was informed by Miss Eccles, who is now in the service of UNRRA, that the antiquities had suffered no damage.

## ATHENS

The excavations in the agora looked fairly tidy but all the board fences surrounding the area have been removed, exposing the whole grounds to easy access by the idle and curious. In the excavation houses I found the pot menders and architects at work carrying on their investigations as if the five years of war and occupation had caused no interruption of their activities.

The Acropolis—regrettably, shockingly, I did not have the time to pay it a visit, but from afar it looks the same as usual. During our first night in Athens, the Periclean buildings were bathed in flood-lights which made them stand out as in former times like jewels set against the starlit sky. They gave one a feeling that there is something of permanency in the kaleidoscopic changes that have rolled over the city.

The National Museum had not been opened yet for the public. One evening I attended a lecture by Professor Orlandos in the new addition to the building on the subject of Recent Investigations in the Parthenon. The attendance was not very large, but the group gathered to discuss archaeological minutiae of the Fifth century showed that the overwhelming catastrophe which they had witnessed and survived had not robbed them of their interest in things of permanent value.

About the same time an article appeared in one of the daily papers giving a report on the activities of the French school during the period of occupation. Its operations are not of a nature to make the headlines. They consisted mostly in supplementary digging and in restorations of some of the monuments at Delphi. The French archaeologists who remained in Greece while the swastika waved over the Acropolis had apparently been free to engage in their professional pursuits.

At the American School Mr. Gorham Stevens has pursued his studies of the monuments on the Acropolis, and embodied the results in a plaster model of the whole citadel (fig. 1). John Travlos has continued his restoration of the buildings in the Agora and made plaster models of some of these. Bert Hodge Hill has been able to retain his healthy sense of humor through the years when he had to share his residence with an officer of the German army of occupation. He too has continued his work on the Acropolis monuments.

After all that the country has passed through since my departure in 1939, I expected to find the archaeologists preoccupied with pursuits other than those of archaeological research. The urge to put aside classical studies and accept positions directly connected with the war effort seems less powerful the nearer you approach the source of inspiration, even though the material circumstances under which such studies had to be pursued could hardly be called conducive to intellectual endeavors. Everywhere one senses a desire to come away from the unpleasantness of the past years and to return to the normal activities of the prewar days. To the victims of





FIG. 1—MODEL OF THE ACROPOLIS BY GORHAM STEVENS  
(By Courtesy of Mr. Stevens)



more recent disasters it may well seem paradoxical, almost ironical, that we should bend our efforts toward uncovering ruins caused by catastrophes long since forgotten. They ask for bread and are offered stones. But to Greece archaeology is something more than a pleasant cultural pursuit for those who have the leisure and the inclination to devote their time to it. It is an important factor in re-establishing the national economy on a peacetime basis, as well as a constant means of publicity abroad. To the archaeologists in America the opportunity is given to rekindle the interest in classical studies at our own universities and at the same time to render material aid to the people of Greece in their hour of distress.

One more invasion from the North has been added to the long list of barbarian incursions into the Hellenic peninsula. Xerxes' army remained for one year, the Turks three and a half centuries. The last of Hitler's hordes left after four years of devastation. But Greece and the Greeks remained through it all, in each case undergoing less changes than those to which the invaders themselves were subjected. Whatever changes she has to endure, Greece is destined to live.

EXECUTIVE VICE PRESIDENT, GREEK WAR RELIEF ASSOCIATION  
NEW YORK CITY

OSCAR BRONEER



## NEWS FROM CONQUERED COUNTRIES

AS WARTIME censorship is lifted, news of our colleagues in various countries and of archaeological work and conditions is slowly becoming available. In France the Germans left the public collections of the country intact and there seem to be no instances of looting in galleries belonging to the State or to the Municipalities. Looting, however, was practised on a huge scale in private collections, where works of art were either simply taken away without compensation, or confiscated under pretense of a fictitious sale. In such cases the objects were said to have been bought from their owners for a price which was arbitrarily fixed, and the money was paid in valueless currency.

An amusing incident happened in the Louvre when the museum authorities were asked to send to Germany a picture by Boucher which, it was said, had attracted the attention of Ribbentrop. At first, the Curators tried to ignore the request, but the insistence of Otto Abetz and Ambassador Brinon compelled them to deliver the picture, which was sent to Germany. However, the Louvre insisted that this could be done only as an exchange, and asked the Germans—as the picture was considered Boucher's best—to exchange it against Watteau's celebrated picture, "*L'Enseigne de Gersaint*." The discussions lasted sometime, and finally the picture by Boucher was returned to Paris.

Several French colleagues were deported by the Germans. Louis Delaporte, the excavator of Malatya, was deported several years ago, and nothing is known of him. Henri Maspero, the Sinologist, was also deported and sent to Weimar, while his wife was sent to Ravensbrück. Jean Lassus, who worked with the Princeton expedition in Antioch, and who was professor in the University of Strasbourg, was also deported from Clermont-Ferrand where he resided. Feyel, the epigraphist and coeditor of the last volume of the "*Inscriptions of Delos*," who was professor in the University of Clermont-Ferrand, was likewise deported to Germany. Nothing seems to be known of him or Lassus. Count Chandon de Brialles, the collector and mediaevalist, who was mayor of his town of Chaource near Troyes, was also deported and no news of him is available.

In Greece, there was an informal archaeological meeting at the National Museum recently at which Orlandos spoke: subject, "*Details about the Parthenon*." Quite a few scholars were present: the two Karouzos, he still the Director of the National Museum, she an ephor as before; Rhomaios; Miliades; Mitsos of the Epigraphical Museum; Miss Konstantinou of the National Museum; Travlos; Mr. Hill; Mr. Stevens; Rodney Young; Jerry Sperling; Gladys Weinberg; Oscar Broneer and others.

"Welter is interned in Peiraeus, acting as cook for the internees. Peshke was also interned, but is expected to be released, as he is a Greek citizen. The German School has been taken over by the OSS (Capt. Charles Edson). The library is locked and sealed by the Greek Archaeological Service."

News from Italy is meagre. Zanotti Bianco has been general President of the



Red Cross and very busy. The Ms. on the excavations at Sele Heraeum is practically complete and ready for publication, with drawings and measurements by Krauss, according to word received from Paola Zancani Montuoro by Karl Lehmann. The work includes a general introduction on the excavation, a description of the later reliefs from the great Temple, as a point of reference for dating the early reliefs, which are the subject of the volume; a chapter on the frieze as a whole (style, art, composition, method and technique, subjects, sources, etc.); a catalogue describing each slab.

The Library of the Institute in Rome and "all of the more or less German libraries (Herziana, for instance)" were carried off by the Nazis—no books or photos left. Most libraries are closed, the books still packed and stored, so that scientific work is difficult.

Two fine books by Krauss are reported: a "Bilderheft" on Paestum and the publication of the Italic Temple, the so-called Tempio della Pace.

Ducati is reported to have been killed by the partisans. Della Seta died a natural death in Padua, where he had been in hiding. The American Academy and its personnel are safe, after difficult years.



## ALEXANDER THE GREAT AND PARMENIO

THE Hellenistic Age, where in the realm of art Beazley has made so many significant contributions, was founded by a young Macedonian concerning whom there is still wide difference of opinion. The purpose of this paper is to examine the darkest moment in Alexander's personal life in the belief that a review of the ancient evidence will place him in an entirely new light.

It was during the halt at Ecbatana in the early spring of 330 B.C. that Alexander first expressed definitely and publicly the conviction that his new and vast empire of many races was not to be governed in the old familiar fashion, with Hellenic despotism substituted for Oriental, but that a new world state was to be formed along very different lines.<sup>1</sup> Though Darius was still alive, albeit in rapid and desperate flight, Alexander's decision to reveal the general nature of his plans at this time was altogether wise, because each step from now on would bring him into lands wholly unfamiliar to the Greek world, and a word of explanation was due his men before the fateful plunge into the East. What does seem extraordinary, however, is Alexander's confidence that he would capture Darius in the Parthian desert and that in the midst of all these various plans and activities he knew what his subsequent move must be, an advance northward across the Elburz mountains against the tribes living beside the Caspian Sea. In fact, while still at Ecbatana, he planned a simultaneous attack on these people from the rear, for as Arrian remarks,<sup>2</sup> "he told Parmenio himself to take the Greek mercenaries, the Thracians, and all the other horsemen except the Companion cavalry, and march by the land of the Cadusians into Hyrcania."

So far as I know, Arrian's simple statement has never been noticed by modern scholars, and I have returned to it many times, always in vain, in the hope that it might throw light on the perplexing problems of the Alexander-history. For our purposes, however, it is sufficient to say that Parmenio apparently never left Ecbatana and that our sources<sup>3</sup> nowhere suggest that Alexander carried on his fighting against the hill tribes of Hyrcania with any expectation of aid from Parmenio. The original orders to Parmenio, in other words, had been forgotten by Arrian by the time Hyrcania was reached, but doubtless not by Alexander, and it is well to bear this possibility in mind when we evaluate the next events.

It was this same summer, near the Lake of Seistan in Afghanistan, that occurred<sup>4</sup> the conspiracy of Philotas, the commander of the famous Companion cavalry, which in its turn led to the execution of Parmenio, the blackest crime, it is universally agreed, in Alexander's life. No doubt Philotas had many grievances, real and imaginary, against Alexander. His own family, ancient and proud, had fought nobly for Alexander, but Parmenio, his father, had been lightly brushed aside and left behind to guard the communications; and one brother, Nicanor, a valiant gen-

<sup>1</sup> See *Hellenic History*, pp. 247 ff.

<sup>2</sup> iii, 19.

<sup>3</sup> Arrian iii, 24; Diodorus xvii, 76; Justin xii, 3; Curtius vi, 5; Plutarch 44.

<sup>4</sup> Arrian iii, 26; Diodorus xvii, 79; Justin xii, 5; Curtius vi, 7; Plutarch 48.



eral, had recently died of disease, while another had been killed in battle. Alexander's endless marches, furthermore, prevented the conquerors from settling down to the enjoyment of their labors, but probably most important of all was the fact that in Macedonia the king was little better than the nobles, and yet here was Alexander grown powerful and aloof, acting and thinking strangely. Had not the time come for the Macedonian nobles to take things into their own hands?

Much as Plutarch's vivid account makes us aware of Alexander's debt to the person and family of Philip's old general, it is in Arrian that we find the full enormity of Alexander's crime, and we may summarize him as follows: Ptolemy says that Philotas was brought before the Macedonians, where he defended himself against the accusations; he also says that those who had reported the plot convicted him by clear proofs and especially because Philotas himself finally confessed that he had heard of a conspiracy against Alexander and had said nothing about it, though he had visited the royal tent twice a day. He and the other conspirators were killed by the Macedonians with their javelins, as Macedonian law dictated, after which Polydamas was sent to the generals in Media. "By them Parmenio was put to death, possibly because Alexander could not believe that Philotas should conspire against him and Parmenio not participate; or perhaps because, even though he had no share in it, Parmenio would be a danger if he survived when his own son had been put to death." No matter which motive we select, Alexander had committed an enormous crime, and we inevitably sympathize with the judgment of modern commentators. Tarn, for example, says,<sup>5</sup> "Alexander decided that Parmenion must die. . . . Philotas' execution had been perfectly judicial; Parmenion's was plain murder, and leaves a deep stain on Alexander's reputation." Wilcken, too, says,<sup>6</sup> "If the condemnation of Philotas was a judicial murder, it is not the fault of Alexander but of the assembly of the Macedonian army. On the other hand Alexander has the sole responsibility for the sequel in the cruel execution of Parmenio. . . . It is the darkest spot in Alexander's life."

Alexander, however, had committed a crime only in the event that in Arrian's sentence quoted above it is Ptolemy and not Arrian who is speaking.<sup>7</sup> Actually, as we shall see, it is Arrian in his fumbling way trying to understand a difficult situation; for, as it happens, it was the law among the Macedonians that the relatives of a conspirator against the king were also held responsible. Curtius, for example, says:<sup>8</sup> "Meanwhile some of the officers who were related to Parmenio, hearing that Philotas was being tortured, and fearing the Macedonian law whereby relatives of conspirators against the king were put to death, committed suicide, while others fled . . . so that Alexander revoked the law."<sup>9</sup> Now, Arrian may have been ignorant of this Macedonian law, but it is hardly credible that Ptolemy, the great Macedonian general and historian and king of Egypt, was. Thus it is safe to assert that in the crucial sentence quoted from Arrian it is Arrian himself who is speaking,

<sup>5</sup> *CAH*, vi, p. 390.

<sup>6</sup> *Alexander the Great*, p. 164.

<sup>7</sup> Cf. my review of Kornemann's *Alexandergeschichte des Königs Ptolemaios*, *AJP*, lviii, 1937, pp. 108 ff.

<sup>8</sup> vi, 11, 20.

<sup>9</sup> It appears from Arrian iii, 27, that the new edict was limited in its application (or not trusted), for Polemo lost no time in fleeing when his brother Amyntas was arrested.



since there could have been no doubt in Ptolemy's mind about Macedonian law; or, to put it another way, Arrian's terrible alternatives disappear from history, and Parmenio's death, having been ordered by the Macedonians themselves as was that of Philotas, becomes a judicial execution.

Since the evidence demands it, Alexander's name must be freed of an unjust charge, and yet it is difficult to believe that Alexander, had he wished, could not have persuaded the army to different action. These were men to whom he owed much, and certain other Macedonians, lesser persons accused with Philotas, were able to win acquittal. Perhaps, as we suggested at the outset, Parmenio had become dangerously unreliable<sup>10</sup> or disobedient, but more probably Alexander's main purpose was to break the Macedonian opposition to him, and the best way to do that, no doubt, was to permit the famous to pay the penalty of the law.

BROWN UNIVERSITY

C. A. ROBINSON, JR.

<sup>10</sup> Alexander, incidentally, relied less on Parmenio than is generally supposed. Even before the start of the expedition, he marched to the Danube without him; later on he frequently ignored his advice, both in battle and concerning the organization of the empire; at Arbela, Parmenio failed him badly: and of course great things were accomplished after his death.



## A LATE ROMAN PORTRAIT HEAD OF ALEXANDER THE GREAT IN BOSTON

THE OVER life-size head of Alexander the Great (figs. 1-2), in the Boston Museum of Fine Arts, was found in Ptolemais Hermiu, a city in upper Egypt founded by Ptolemy Soter, and now named el Menschiye.<sup>1</sup> It has been published and illustrated by Helbig, Salomon Reinach, Ujfalvy, Bernoulli and Arndt,<sup>2</sup> but not by American scholars, who have considered it a forgery.<sup>3</sup> I asked Professor G. Chase of Harvard University what were his and the late director Caskey's reasons for suspecting the head. He very kindly made a new investigation and wrote to me that "Caskey was very suspicious about the genuineness of this head, especially I found since there was a note in the records of the Museum, that Mr. E. P. Warren, through whom it was obtained, doubted its genuineness. I know my opinion was affected by that of these two gentlemen, and the back of the head, which has been worked over in any case, seemed to me to confirm my suspicions. However, in checking the Museum record, I found an interesting letter from Henry Washington, whose opinion in matters of this sort was highly valued. This gives many facts about the marble and weathering. . . ."

This letter—more than six pages long—to me seems so important for the question of forgery in general, that I give here some excerpts from it:

"The marble may also have come from Asia Minor."

"My opinion is in favor of the latter as the place of origin."

"We can only say with safety that it is not Parian or Pentelic of the best qualities, and that it may be either Carrara or from Asia Minor."

"The point to which special attention was given was the weathering, which may unquestionably be referred to two distinct periods. To the first belong a number of small areas which occur on the hair."

"This type of weathering is characterized by the original surface being replaced by shallow pits with steep sides. The bottoms and the sides are formed of grains which are separated from each other by deep narrow crevices, giving rise to a very rough surface, though on a very small scale. There is also a peculiar gray color to this weathering surface, due to dust lodged between the grains, which is quite characteristic, though possibly easily imitable. Weathering of this kind is produced only by exposure to the weather above the surface of the soil, as far as I have observed, and is due to the solvent action of the traces of carbonic acid present in rain water. Calcite, the mineral of which marble is composed, is slightly soluble in this extremely weak acid, and as the solution is so excessively dilute, considerable time is needed for its action to result in the production of pits of any depth. The action will take place first on fractured surfaces, since these present in the broken grains more points of attack than the smoothly worked original surfaces. It will be noticed that nearly all of the areas of this weathering are on the ends of locks or similar slight projecting points, which would be likely to suffer from slight accidents."

<sup>1</sup> *Twenty-First Annual Report of the Museum of Fine Arts, Boston*, 1897, p. 21, no. 2. No restorations. H. 0.48 m. (about 19 inches); length of face 0.243 m. (almost 10 inches).

<sup>2</sup> W. Helbig, *MonAnt.* vi, 1895, pp. 73 ff., figs. 1-2, pl. 1; Salomon Reinach, in *GBA.* 1902, p. 140, with plate; Ch. de Ujfalvy, *Le Type physique d'Alexandre le Grand*, 1902, p. 98, pl. iv; J. J. Bernoulli, *Die erhaltenen Darstellungen Alexander des Grossen*, 1903, p. 70 f., figs. 16-17; P. Arndt, *Griechische und römische Porträts*, p. 31 f., pls. 481-482.

<sup>3</sup> It is excluded from G. H. Chase, *Greek and Roman Sculpture in American Collections*, 1924, and L. D. Caskey, *Catalogue of Greek and Roman Sculpture in the Museum of Fine Arts, Boston*, 1925.



"This kind of weathering, it seems to me, is quite impossible of imitation for the following reasons. It cannot be produced by any sort of blow, since this would not give rise to the very characteristic steep walls, and would fracture the grains and leave the dust behind in the crevices. The steep walls bounding the pits, it may be stated, are due to the fact that this weathering takes place, as has been said on fractured surfaces. The carbonic-acid-bearing water, not having great action on the smooth surrounding surface, dissolves the calcite downward at right angles to the surface giving rise to perpendicular, or even undercut, walls. The crevices between the grains, which stand up sharply separate from each other, the lack of dust and crushed or broken grains, and above all the fact that this appearance is also found on the sides, preclude absolutely any idea that these pits can be imitated by working



FIG. 1.—ALEXANDER THE GREAT  
(Courtesy of the Boston Museum of Fine Arts)



FIG. 2.—ALEXANDER THE GREAT  
(Courtesy of the Boston Museum of Fine Arts)

with a tool. The use of acids, such as nitric, hydrochloric or acetic, is also out of the question, since if any of these were used in solutions which to the non-chemist would be dilute but still deemed capable of dissolving marble, they would attack it much more energetically, rounding the grains and smoothing the surface, and not giving rise to the deep narrow interstitial crevices. These are simply enlargements and deepening of the original junctions between the constituent grains, where the feeble carbonic acid solution is best able to dissolve the grains, since it can remain longer without evaporating. The difference of action is so slight as to be appreciable only in the case of an easily appreciable acid solution such as any forger would use."

"As to the time necessary to produce these pits by exposure to the weather, no very definite answer can be given. In the first place it depends largely on the climate of the region and the amount of rainfall, as well as the kind of exposure."



"I would say that a great many years, over a century, and possibly many centuries, are necessary for the production of the pits on this head."

"From the above description and discussion we may safely conclude that these weathered areas are natural and not the work of a forger. Their presence therefore is excellent proof that the head is ancient."

"The length of time involved in this weathering also precludes the idea of modern forgery, while this also, as well as the provenance of the head, militates against the idea of any forgery in the Renaissance times."

"The second type of weathering consists almost entirely of simple discoloration, accompanied by only a very slight loss of roughening of surface. This is found on the face and also on the upper sides of the hair. It is very slight, and seems to have been produced, or is at least possible of production, beneath the surface of the soil in a comparatively dry climate, such as that of Egypt."

"There are no traces of 'tartar,' or other such incrustations, to be seen on the head, indicating that the soil in which it supposedly lay was not calcareous, or, if so, not moist."

"On the right cheek, in front of the ear, are some brownish lines, which look like root-marks."

"The whole top and back of the head seem to me, without any doubt, to have been worked over quite recently, or at least with no subsequent exposure to the weather, either above or below the surface."

I am confident that these observations of an expert free the head from any suspicion of falsification. I am also convinced that the working over of the back of the head, observed by Dr. Chase and Mr. Washington, was done in ancient times when the head was set into the body of a colossal cult statue of Alexander. Such large statues of Alexander were quite frequent in temples erected to the deified Alexander in Egypt and Macedonia and probably also in profane buildings in Rome and other places. An example is the statue of Alexander found in the Roman Baths in Cyrene.<sup>4</sup> Mostly, however, only the colossal *heads* are preserved, such as those in Rome in the Capitoline and Barracco Museums, in Copenhagen from Tarsus, in Madrid and in Chatsworth.<sup>5</sup> Probably the bodies were made of gilded wood or stucco, which means that these heads come from acrolithic statues, a cheap equivalent of chryselephantine cult statues. The explanation as to why outstanding scholars suspected the Boston head to be a forgery is to be found in the fact that it does not fit our conception of Greek art.

The Boston head is, indeed, a Roman head and it is in my opinion one of the latest, if not the latest, of the above mentioned group of sculptured Roman portraits of Alexander. The drill technique is late Roman and not possible before the time of the Antonines. The style is that of the time of Caracalla, as recently so well described by G. Rodenwaldt.<sup>6</sup> He explains how the period of Caracalla (211-217)

<sup>4</sup> E. Ghislanzoni, in *Notiziario archaeologico* ii, 1916, pp. 105 ff., figs. 47-48 and 51; G. Bagnani, in *JHS.* xli, 1921, p. 237 f., pl. xvii, 1.

<sup>5</sup> W. Helbig, *op. cit.*, pls. II-III; W. Helbig and Barracco, *La Collection Barracco*, pp. 43 ff., 62, pls. 57-57a; Ch. de Ujfalvy, *op. cit.*, pl. III; J. J. Bernoulli, *op. cit.*, p. 52, fig. II; pp. 77 ff., figs. 19-20; pp. 84 f., fig. 26. P. Arndt, *op. cit.*, pls. 186-7, 477-8, 483-4; Stuart Jones, *Sculptures of the Museo Capitolino*, p. 341 f., Stanza del Gladiatore, no. 3, pl. 85; E. G. Suhr, *Sculptured Portraits of Greek Statesmen*, The Johns Hopkins Studies in Archaeology, no. 13, 1931, pp. 92 ff., fig. II; F. Poulsen, *Katalog Ny Carlsburg Glyptothek*, 1930, p. 312, no. 445; A. Furtwängler, in *JHS.* 21, 1901, pp. 212 ff., pls. IX-X; Th. Schreiber, "Studien über das Bildnis Alexanders des Grossen," *Abh. sächs. Akad. d. Wiss.*, 1903, pp. 59 ff., 67 ff., pls. IV, 1-2, and V.

<sup>6</sup> G. Rodenwaldt, in *CAH.* xii, 1939, pp. 545 ff. He deals in this Chapter XII with "the transition to late-classical," meaning late ancient or rather late Roman art.





FIG. 3. — ALEXANDER THE GREAT  
COIN MINTED IN BEROIA, MACEDONIA



FIG. 4. — ALEXANDER WITH AMMON'S HORN  
COIN MINTED IN BEROIA, MACEDONIA



FIG. 5. — ALEXANDER WITH LION'S SKIN  
COIN MINTED IN BEROIA, MACEDONIA



FIG. 6. — ALEXANDER WITH CORSELET AND SHIELD  
COIN MINTED IN BEROIA, MACEDONIA



and Severus Alexander (222-235) embraces "both the zenith and the decline of that nervous and excitable style which had matured in the late Antonine age. A change in style, already foreshadowed under Antoninus Pius, had taken place in the seventies of the second century, when Roman sentiment, driven underground by Hadrianic classicism, came to the surface anew. This was a renaissance of the Flavian style in the strong expressiveness of which we recognize the first indications of the late-classical."

This characterization of Rodenwaldt applies to contemporary portraits, but fits also the head in Boston. An interesting fact is that the same characteristics appear also on the coins which were minted from 231 to 249 in Beroia in Macedonia, beginning in the later period of Severus Alexander (figs. 3-6).<sup>7</sup> They, like the Boston head, have thick and irregular strands of hair, a noticeable lifting of the head, deep-set eyes, and an emotional expression. It is a Roman conception, based on the irrational and romantic Hellenistic conception of the deified Alexander, but with exaggerated movement and heightened emotion. I am convinced that these coins not only occasionally imitate older coins, like the ones minted by Lysimachus, but, more frequently, statues of the type to which the Boston and related heads once belonged.

This result is important also for the problem of the celebrated gold medallions from Tarsus and Abukir.<sup>8</sup> While the three Tarsus medallions have never been suspected, the twenty much more variegated Abukir medallions have had to suffer heavy attacks. A study of the colossal heads and the Macedonian coins, which are contemporary with the medallions, has led me to the side of those who defend their genuineness. The portraits on the medallions are, in my opinion, based on similar, or perhaps partly on the same statues, as the coins. It may not be an accident that the head in Copenhagen was found in the same place as the Tarsus medallions and the head in Boston in the same country as the Abukir medallions. They, together with the Boston head, represent the emotional temperament of their age and are among the best works of the first half of the third century A.D.

COLUMBIA UNIVERSITY.

MARGARETE BIEBER

<sup>7</sup> H. Gaebler, in *ZfN.* 24, 1904, pp. 316 ff., pls. VI-VII; 25, 1905, pp. 1 ff., pls. I-III; *idem*, *Die antiken Münzen Nordgriechenlands* iii, *Die Münzen von Makedonien und Paionia* iii, 1, pp. 14 ff.; 94 ff., pl. IV, nos. 11-19; iii, 2, pp. 12 ff., 47 ff., pl. IV, nos. 19-23; pl. XI, nos. 25-28; Th. Schreiber, *op. cit.*, pp. 180 ff., pl. XIII, nos. 8-12 and 20-23. Our figures 3-6 are taken from *ZfN.* 25, 1906, pl. II, 28 and 35; pl. III, 38 and 55.

<sup>8</sup> A. de Longpérier, in *Rev. Num.* 1868, pls. X-XII; *ibid.*, 4th série xiii, 1908, pp. 309 ff.; Mövat, *ib.* VII, 1903, pp. 1 ff., pls. I-II; Th. Schreiber, *op. cit.*, p. 189 ff., pl. XIII, 16; H. Dressel, *Fünf Gold-medallions aus dem Funde von Abukir*, *ABA.* 1906, pls. I-IV; E. Newell, in *AJN.* XLIV, 1910, pp. 128 ff., pls. 14-15; K. Regling, *Die antiken Münzen*, Berlin<sup>2</sup>, 1929, p. 149 f.; E. G. Suhr, *op. cit.*, p. 185 ff.; K. Gebauer, in *AM.* 63/64, 1938/9, pp. 23 ff.



## THE GIRL BENEATH THE APPLE TREE

THE fourth mime of Herondas is a fascinating document of life, religion and art in the Hellenistic age. In connection with the results of excavations on the site, the poem allows us to visualize the central section of the renowned sanctuary of Asklepios on the island of Hippokrates, as it looked in the third century B.C. With the help of a small piece of sculpture which is preserved in the archaeological collection of the Institute of Fine Arts of New York University (fig. 1), it seems possible to add one more quite significant detail to what is already known.

Among the sculptures around the altar in front of the temple, the visiting women admire a figure whose character has, thus far, not received a definite interpretation:

"Look here, my dear! That girl! How she stares up at the apple!  
Wouldn't you say that she is going to die unless she gets that apple?"<sup>1</sup>

In the context of the description of other works of art in the open space around the altar, it is clear that this figure was a sculptural representation. About this, but only about this, all interpreters agree. Some have considered it a statue in the round; others have thought of a representation in relief.<sup>2</sup> In both instances, opinions of modern writers have been torn between the assumption that a girl was represented under an apple tree and the suggestion that it formed part of a group including an adult who extended an apple to the child.<sup>3</sup> But the figure of an old man which is subsequently mentioned by the poet was certainly not connected with the child. The theory of a group would, thus, have to be based on the assumption that Herondas failed to allude to the most conspicuous part of such a group, whether it was a three-dimensional work or a relief.

The unique sculpture reproduced here<sup>4</sup> solves the riddle. It, at least, illustrates the type of monument referred to by Herondas, if it is not an exact copy of that very monument—which it may well be. It is a small piece of white, purple-veined marble, which may be Phrygian. The base has a concave moulding on the front and sides, but is only roughly cut on the back. At the left, the lower part of a tree is preserved. It is broken above and its upper part, together with that of the big snake curling around the trunk, is lost. The tail of the snake is broken off, too, but it has

<sup>1</sup> "ὄρη, φίλη, τὴν παῖδα τὴν ἄνω κείνην  
βλέπουσαν ἐς τὸ μῆλον· οὐκ ἔρεῖς αὐτήν,  
ἦν μὴ λάβῃ τὸ μῆλον, ἐκ τάχα ψύξει;"

R. Herzog, *Die Mimien des Herondas*, Leipzig, 1926, iv, ll. 27 f.

<sup>2</sup> Statue: W. Gurlitt, *AEM.* 15, 1892, p. 169; H. Diels, *A.A.* 1891, p. 190; Svoronos, *Ἔφ.* 1909, p. 152; *ib.*, 1917, p. 89. Relief: Herzog, *op. cit.*, note, and *JOAI.* 6, 1903, p. 221, considered either sculpture in the round or relief possible.

<sup>3</sup> Both possibilities considered by Herzog who, however, in his later edition, withdrew his earlier suggestion that the adult could have been the old man described in ll. 30 f. Only Svoronos, *op. cit.*, has assumed a group including this old man. That the girl was independently represented is implied in the statements of Gurlitt and Diels.

<sup>4</sup> It is part of a small collection which includes some other interesting pieces and which was gathered together by the late Professor Ralph van Deman Magoffin. No records regarding purchases are available and no accession catalogue has been found. The provenance, thus, is unknown. Preserved height: 0.245 m.





FIG. 1.—MARBLE GROUP, NEW YORK UNIVERSITY



left the trace of its pointed end on the base in front of the tree. Next to it a girl sits on the ground. She is wrapped in a cloak which covers her entire body — with the exception of her bare feet, her arms, and her head. Her legs are crossed and her right hand supports her head, the right elbow being poised on the left hand. The turn of the head indicates that she looks intently upward toward the right: there, the crown of the tree unfolded and it is in this direction that she "stares up." That this restoration and interpretation are correct can be seen even now: the entire surface of the base at the right is intact and conspicuously empty; as it is now, the sculpture is out of balance and, without props such as were used in putting it up for the photographer, it topples backward to the left; for mere stability's sake, the right part of the base requires over it the counterweight of the now lost crown of the tree. And the very extension of the crown in that direction explains the curious shape of the base which corresponds to the ancient law that the upper part of the sculpture should not exceed the extent of the base. We may conclude that an apple was conspicuously modelled in that part of the tree towards which the girl's gaze is directed. For, not only does the attitude of the girl under the tree illustrate the passage of Herondas in a unique fashion, but there is also the mighty sacred snake of Asklepios which, to the ancient spectator, indicated the religious connection of the work.

Sketchy and summary as the execution of this picturesque little work is, it still gives the impression of a Hellenistic work of art. This is true even of the "liquid," post-Praxitelean modelling and the rather restrained, though marked polish of the marble. Yet the form and moulding of the base seem to indicate that our monument is a Roman copy rather than Hellenistic work, however casually executed. As such, this work of unknown provenance may well have been produced in Kos, as a copy of the original mentioned by Herondas. Small-sized marble sculptures were particularly common on the island during the Roman age.<sup>5</sup> On the other hand, we are familiar with the practice of Greek island sculptors of that age of reducing local works of art to small marble copies.<sup>6</sup> Whether the original, which was probably seen by Herondas before 247 B.C.,<sup>7</sup> was of bronze or marble must remain undecided. In view of the bold sculptural concept of the tree with its overhanging crown, one might be inclined to prefer bronze for the prototype — though naturalistic trees in marble sculpture in the round appeared as early as the Western pediment of the Parthenon. The size of the original must remain unknown, too, but one may assume that it was considerably larger than our miniature copy. All the works mentioned by Herondas seem to have been quite conspicuous.

The statue described by Herondas has been called a "genre" figure.<sup>8</sup> That modern term is probably not applicable to any ancient work of art which was dedicated in a sanctuary. On the other hand, the attempt has been made to interpret the numerous statues and statuettes of children with birds or fruits as images of divine children: of Asklepios and his family.<sup>9</sup> This interpretation can have convinced few archaeolo-

<sup>5</sup> See, *Cl. Rh.* 5, pt. 2, pp. 143 f.

<sup>6</sup> P. Baur, *Eileithyia*, Tuebingen, 1901, p. 485 — the original and the reduced copy of a crouching boy from Paros.

<sup>7</sup> Gurlitt, *op. cit.*, pp. 172 f.

<sup>8</sup> Diels, *l.c.*

<sup>9</sup> Svoronos, *op. cit.*, pp. 133 f.; *ib.*, 1917, pp. 78 f. The unfortunate interpretation by Murray (in a note to Kenyon's edition of the papyrus) of the girl who longingly looks at an apple as a Hesperid, has happily found the oblivion it deserved.



gists, but in advancing it, its author has successfully demonstrated that such statues of children were particularly common in sanctuaries of Asklepios. Furthermore, he has shown that the most popular pet animal, the goose, as well as the apple—the central motive of this monument as described by Herondas—can be related to that cult. In the present instance, the god's sacred snake adds a further detail to this connection. Undoubtedly the statue in Kos and our copy were votive gifts for the welfare of children and were meant to secure the protection of Asklepios for them. One is reminded of the modern Greek custom of addressing the parents of a small child with the words: "May they live long!"

Stylistically, the work sketchily reproduced in our marble statue is not without interest. The crouching figure of the girl, with its complicated movement caught within a solid cubic mass, fits well into the development of sculpture after the Tyche of Antioch. But the pictorial treatment of the subject of a small figure seated under a naturalistically rendered tree is a bold illustration of pictorial tendencies in early Hellenistic art. The poor quality of the copy and its very fragmentary preservation make it impossible to realize fully the charm of the bold innovation of the original. There exist few parallels in antique art to this sweepingly picturesque experiment in sculpture in the round.<sup>10</sup> It definitely was not fit for monumental sculpture. Later expressions of the same spirit are to be found in the free distribution of Pergamenian groups in a natural setting and in pictorial reliefs of the Hellenistic age.

NEW YORK UNIVERSITY

KARL LEHMANN

<sup>10</sup> Cf. Lamb, *Greek and Roman Bronzes*, London, 1929, pl. 92, and the terracotta group of the Death of Archemoros, *Coll. Lecuyer*, 1883, n. 127, pl. 12. One might also recall the tree-shaped sculptural lamps, the one by Kallimachos (P. Jacobsthal, *Ornamente griechischer Vasen*, Berlin, 1927, pp. 96 f.) and the fourth-century lamp in the form of an apple tree which was later in the temple of Apollo on the Palatine (Pliny, *NH.* 34, 8).



## THE PRIESTESS OF PANDROSOS

THE evidence concerning the cult of Pandrosos in Athens has been conveniently assembled by A. B. Cook.<sup>1</sup> Additional information is provided by an Attic decree concerning the genos of the Salaminioi.<sup>2</sup> This inscription contains the provision (lines 11–12) that the priesthood of Aglauros, Pandrosos, and Kourotrophos should be filled by a member (or by the daughter of a member) of the genos, and that the priestess should be elected by lot. It states, moreover (line 45), that the priestess of Aglauros and Pandrosos should receive a loaf of bread from the loaves kept in the sanctuary of Athena Skiras. Ferguson, who commented at length on this important document, re-examined (*loc. cit.*, pp. 20–21) the evidence concerning the cult of Aglauros and Pandrosos. He called attention to the only known priestess of Aglauros (*IG. ii* 2, 3458–3459), Phēidostrate, daughter of Eteokles from Aithalidai, and he apparently assumed that her family belonged to the genos of the Salaminioi.<sup>3</sup> It so happens that we know also of a priestess of Pandrosos from a fragmentary inscription now published as *IG. ii* 2, 3481. The text of this document can be completed by the addition of an apparently unpublished fragment in the Epigraphical Museum of Athens (E.M. 12364).

ΟΔΗΜΟΣ  
ΦΙΛΙΣΤΙΟΝΔΗΜΟΧΑΡΟΥ  
ΑΙΘΑΛΙΔΟΥ ΘΥΓΑΤΕΡΑ  
ΙΕΡΕΙΑΝ ΠΑΝΔΡΟΣΟ Υ

FIG. 1. — E.M. 12364 + *IG. ii* 2, 3481

ca. 150 B.C.

ὁ δ[ῆ]μος  
Φιλίστιον Δημόχαρου  
Αἰθαλίδου ] θυγατέρα  
ἱερεῖαν Πανδρόσου.

It may be assumed from the demotic of Demochares and from the fact that his family belonged to the genos of the Salaminioi that he was a relative of Pheidostrate,

<sup>1</sup> *Zeus* iii, pp. 243–245; compare O. Broneer, *Hesperia* i, 1932, p. 53; G. P. Stevens, *Hesperia* v, 1936, p. 489; O. Broneer, *Hesperia* viii, 1939, p. 428.

<sup>2</sup> W. S. Ferguson, *Hesperia* vii, 1938, pp. 1–74, no. 1.

<sup>3</sup> H. R. Immerwahr, *Hesperia* xi, 1942, pp. 344–347, no. 3, published an inscription honoring another member of this distinguished family. According to the letter forms, the inscription seems to belong to the second century B.C.



the priestess of Aglauros. This assumption is significant because we know the names of several other members of this family. An inscription from Delos (*I. de Délos*, no. 2381) records a dedication made while Demochares from Aithalidai was agoranomos.<sup>4</sup> This Demochares may be a descendant of Philistion's father, perhaps his grandson. His date can be determined because his colleague Charias, son of Charias, from Aithalidai (probably a relative), is known.<sup>5</sup>

Philistion, as a woman's name, is sufficiently rare both in Athens and elsewhere to warrant the addition of a few remarks concerning two other Athenian women who had this name. First may be mentioned the tombstone of Philistion, daughter of Demochares from Azenia, wife of Timotheos from Melite (*IG. ii 2*, 5315). It is puzzling to notice that the fathers of this woman and of the priestess of Pandrosos had the same name Demochares but that they belonged to different demes. This may be a mere coincidence which should warn us to be careful in making identifications. On the other hand, the change of the deme, accompanied by the identity of the names, may indicate that an adoption took place somewhere along the line.

The third inscription containing the name Philistion is published as *IG. ii 2*, 3475, and it can be completed by the addition of *IG. ii 2*, 3476 which obviously belongs to the same round pedestal.<sup>6</sup>

AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

ANTONY E. RAUBITSCHKE

<sup>4</sup> The name of Demochares' father may be restored as Δ[ωσιθέ]ου or Δ[ιοδώρ]ου with reference to *IG. ii 2*, 2336, line 58, and *I. de Délos*, no. 2006. Straton, the father of Dosithea, is also known as a demesman from Aithalidai (*IG. ii 2*, 2336, lines 58-59).

<sup>5</sup> The stemma of the family, drawn up by P. Roussel, *BCH.* xxxii, 1908, p. 367, no. 577, and based upon *I. de Délos*, nos. 2609 and 2381, may be enlarged by the inclusion of the men mentioned in *I. de Délos*, no. 2595, lines 7, 12, 33; *IG. vii*, 416, lines 27-28; *IG. ii 2*, 1009, line 67, 2336, lines 220 and 231 (*HarvSt.* li, 1940, p. 123, lines 227 and 238). This augmented family tree includes a brother of the younger Charias, Dositheos, who is mentioned as son of the older Charias (though without demotic) in *I. de Délos*, no. 2595, line 12, and whose complete name may now be confidently restored in *IG. ii 2*, 1009, line 67. The old reading of the demotic [X]ολλιδης is epigraphically possible since only the tops of the letters are preserved, but it is made unlikely by the different spelling of the demotic in lines 75 and 78 of the same inscription.

<sup>6</sup> This combination will be published elsewhere. Attention may be called to the fact that Kirchner's date of *IG. ii 2*, 3475/6 is too early, and that of *IG. ii 2*, 4690 is too late. The activity of the priestess Glauke may be dated at the beginning of the first century B.C.



## AN UNUSUAL BLACK-FIGURED CUP

THE vase published here for the first time (figs. 1-6) is said to have been found during the 1930's near the village of Koropi in the Attic Midlands. It is now in private possession in Athens. It is an unusual and important vase and deserves a better write-up than I am able to give it in this brief article which is perforce written at odd moments and without access to recent literature.<sup>1</sup> The admirable photographs taken by Miss Alison Frantz just before the start of the war in Greece will, however, compensate in large measure for the article's shortcomings and are, indeed, the chief justification for attempting a publication of the vase at this time.

The vase was found broken into many pieces, but it has since been mended and the missing parts of the rim, bowl and foot have been restored in plaster.<sup>2</sup> In shape and general scheme of decoration (figs. 1, 2) it may be classed as a little-master cup,<sup>3</sup> although it does not fit exactly into any one of the sub-groups of this class, lip-cup, band-cup or Droop cup.<sup>4</sup> It is perhaps closest to the Droop cup, having a number of the small features which distinguish this group from the band-cups,<sup>5</sup> and as such it would come under Ure's heading III A: "handle zone decorated with animal or human figures; lower part of bowl mainly black." The most striking feature of our cup, however, the decoration in the handle zone consisting of human busts with the flesh parts done in outline technique, has not hitherto been found in Droop cups or band-cups. The usual place for decoration of this sort is the lip of lip-cups, where single heads are often found, and it occurs occasionally on vases of other kinds.<sup>6</sup>

Before looking further into our vase's connections, however, it would be well to give a brief description of the figured scene. The scene on either side is essentially the same, three busts separated from each other by palmettes and from the handles by snakes. On A the two end busts are male, the central one female, on B all three are female. There are inscriptions in the field. The left hand bust on A (fig. 3) is a bearded male with long hair falling down on his shoulder where it ends in a knot. His beard is red and its outline is incised. His garment is also red, and the red has been carried over the reserved space intended to represent his bare arm. There was

<sup>1</sup> With a few exceptions I have not had access to books or periodicals more recent than 1939-1940.

<sup>2</sup> Height 0.16m. Diameter at lip, 0.27 m. The missing parts, of which a large proportion is unfortunately from the figured zone, can be clearly distinguished in the photographs. At the left side of face B the glaze has flaked badly so that the drawing is largely obliterated.

<sup>3</sup> Beazley, *JHS*, lii, 1932, pp. 167 ff.

<sup>4</sup> Ure, *JHS*, lii, 1932, pp. 55 ff.

<sup>5</sup> The following may be noted. Below the red fillet at the junction of bowl and stem there is a reserved band (not grooved). The hollow cone inside the stem has a black band, 0.025 m. wide at its lower end, and only the upper part is reserved. The lip is rather sharply offset and curves in rather deeply. The reserved band inside the lip is not right at the edge, but some 0.025 m. down. The upper half of the outer edge of the foot is straight and black, while the lower half is convex and reserved, thus being a combination of Droop cup and band-cup or lip-cup practice. It may also be noted that the under side of the foot and the inner faces of the handles are reserved and that at the center of the bowl there is a small reserved disc in which part of a black circle is preserved.

<sup>6</sup> Beazley (*JHS*, lii, 1932, pp. 175 and 183) cites one instance of the occurrence of an outline head in the handle zone of a lip-cup (Berlin, inv. 4495) and (*ibid.* pp. 175 and 203) one instance of a band-cotyle with head decoration in the handle zone, not, however, in outline but in ordinary black-figure technique (Munich 2181, *Jdl.* 22, 1907, p. 105). Buschor discusses a number of vases on which busts, generally not in outline, occur ("Feldmäuse," in *SBAW*, 1937, pp. 4 ff.).





FIG. 1.—BLACK-FIGURED CUP IN ATHENS. SIDE A.



FIG. 2.—BLACK-FIGURED CUP IN ATHENS. SIDE B





FIG. 3.—DETAIL OF A



FIG. 4.—DETAIL OF A



FIG. 5.—DETAIL OF B



FIG. 6.—DETAIL OF B



a row of white dots along the upper border of his garment. The strand of hair nearest his neck is red. His necklace consists of a row of black dots. In the field in front of him is a meaningless inscription, retrograde: ONENOIEN. The central bust on A (figs. 3, 4) is that of a woman. She wears a crown decorated with white dots, and her hair falls down on her shoulder and is tied in the same way as that of the man. There is a row of white dots along the upper border of her garment, and her necklace consists of a row of black dots. In front of her is a meaningless inscription: KNIONI, and behind her is another: KAVITINE. The latter is a possible female name, perhaps intended for Καλλιτιμή. The right hand bust on A (fig. 4) is again that of a man. He wears a pointed cap with horizontal stripes of which alternate ones are red. His beard is glazed and decorated with short incised strokes and its outline is incised above with a double line, below with a single line. His garment is red and the red has been carried over the reserved arm space as in the case of the other man. In front of him is part of an inscription, retrograde: ΕΙ . . . ΕΝ. The serpent between this figure and the handle is the only one of the handle serpents whose head is complete even to the white dots representing the teeth. On another of the serpents, the upper part of whose head is preserved (fig. 6), there are incised lines resembling whiskers. The serpents' bodies are sharply looped and decorated partly with incision, partly with added red and white dots. The palmettes on both A and B are of a sturdy, erect type with two spiral tendrils on either side. Alternate petals are red. The hearts are red and bordered above by a row of white dots between incised lines.

The figures on the reverse, B, are in general not as well preserved as those on A. The serpent and the female bust at the left (fig. 5) are nearly obliterated. In front of the bust part of a letter, probably an initial  $\varsigma$ , is preserved. The central figure on B (figs. 5 and 6) is tolerably well preserved. She wears a closely fitting headdress, red except for the central part which is decorated with an incised criss-cross pattern bordered by white dots. Her garment is red and its upper border has incised decoration. The space indicating the arm is reserved. In front of her part of an inscription is preserved: \NA. . . Of the right hand woman on B (fig. 6) the lower part of the face is unfortunately missing. She wears a close fitting pointed cap divided vertically by an incised pattern. The front half of the cap is decorated with tiny, carefully placed white dots, sometimes in groups of three, sometimes singly; the rear half is red. Her necklace is a zig-zag line of glaze with a dot at each angle. Her garment is red, the arm space reserved. In front of her head is an inscription, retrograde:  $\varsigma$ IMV/IS ( $\Sigma\iota\mu\upsilon\lambda\iota\varsigma$ ). This name appears twice on a black-figured hydria in the British Museum showing women drawing water at the fountain of Kallirrhoe.<sup>7</sup>

In seeking stylistic parallels for our vase one naturally thinks first of the lip-cups decorated with outline heads.<sup>8</sup> Before discussing these, however, we must look at a

<sup>7</sup> No. B 331. *CVA*. III, H, e, pl. 88, 3. The reading of the inscription seems to be given incorrectly in the *Corpus* text, to judge at least from the photograph reproduced in the *Corpus* and from the earlier publications of the vase, e.g. the *British Museum Catalogue* ii, p. 193 and p. 31, fig. 38. Beazley notes, however (*JHS*. li, 1931, p. 122, *init.*), that the vase has been considerably repainted, so I suppose it is possible that the *Corpus* reading is the more accurate.

<sup>8</sup> List, Beazley, *JHS*. lii, 1932, pp. 174-5; cf. *JHS*. lix, 1939, pp. 282-3.



vase which is even more closely connected with ours than any of the lip-cups. A kylix in Naples<sup>9</sup> with busts of Dionysos and Semele on one side and of Dionysos and three maenads on the other seems, if one can trust the old drawings,<sup>10</sup> to be very close stylistically to our vase. We may note especially the noses, the rather full faces and especially chins of the women, the necklaces, earrings, ears, and details of the headdresses.<sup>11</sup> There are, indeed, so many points of resemblance that there is no need to dwell on them. There can be no doubt that the two vases are the work of one hand and that they were painted within a very short time of one another.<sup>12</sup>

Rumpf has attributed the Naples vase to Sakonides,<sup>13</sup> so in turning to the lip-cups it is natural to look first at those signed by and attributed to this painter.<sup>14</sup> The closest is the signed cup in Berlin<sup>15</sup> with which Rumpf connects the Naples vase because of the similarity of the women's heads, particularly in regard to their headdress and their pointed noses. I do not feel, however, that the similarities are sufficient to warrant attribution.<sup>16</sup> The other head vases by Sakonides do not resemble the Naples vase or our vase at all, being in quite a different manner.<sup>17</sup> Among the other outline drawings of the mid-sixth century<sup>18</sup> there are points of contact, especially in details, with our vase and the Naples cup, but I know of nothing strikingly similar. Perhaps when photographs of the Naples cup are published it will be possible to make some comparisons and draw some conclusions. Meanwhile it is best to keep these two cups separate as the nucleus of a new group.

U.N.R.R.A. GREECE MISSION

EUGENE VANDERPOOL

<sup>9</sup> Santangelo 172. A. Rumpf, *Sakonides*, p. 11, and p. 24, no. 20 (bibliography); Hansjörg Bloesch, *Formen attischer Schalen*, Bern, 1940, pp. 4 and 31, and pl. 2, 1 (with further bibliography).

<sup>10</sup> I know of no photographs of this vase save the small one in Bloesch, *l.c.*, which was taken to show the shape of the vase rather than the pictures and is in any case too small to be of much use in judging the style.

<sup>11</sup> The inscriptions, too, have points of similarity, some being retrograde, others not, some being names, others nonsense. Among the last we may note the recurrence of the letters EIO which appear at least once on our vase and three times on the Naples vase. Compare the inscriptions gathered together by Beazley in *AJA.* xxxiii, 1929, pp. 361-2. Most of the vases on which these inscriptions appear are by the painter of Berlin 1686 (Beazley, *BSA.* xxxii, 1931-1932, pp. 10-11). Because of the difference of technique it is difficult to compare the style of the two vases under discussion here with those by the painter of Berlin 1686. A few points of similarity can be discovered, but there is nothing striking and I do not think they are by the same hand.

<sup>12</sup> Probably during the forties of the sixth century B.C.

<sup>13</sup> *Sakonides*, p. 11 and p. 24, no. 20.

<sup>14</sup> Rumpf, nos. 1-10. Beazley, *JHS.* lix, 1939, p. 283.

<sup>15</sup> Inv. no. 3152, Rumpf, no. 1. Cf. also the Berlin fragment, F 1757, Rumpf, no. 9, which has been attributed to Sakonides. Beazley accepts this attribution, *JHS.* lix, 1939, p. 283. Miss Pease rejects it, *AJA.* xlvii, 1943, p. 496, and I am rather inclined to agree with her.

<sup>16</sup> The other vases with which Rumpf connects the Naples cup belong to the Lydos group which he believes to be by the same hand as the Sakonides vases. Here again, although there are some resemblances they are not sufficient for an attribution. Thus the Naples cup seems to me to fail as a stylistic link between Lydos and Sakonides, a link which I do not think Rumpf has succeeded in establishing.

<sup>17</sup> With Miss Pease (*AJA.* xlvii, 1943, p. 496) I reject the New York Epitimos cup (Rumpf, no. 10) as a work of Sakonides. The whole cut of the outline heads with their great staring eyes is different from Sakonides' work. Rumpf has overworked the headdress as a criterion of style. It is much more likely, as Miss Pease suggests in her review (*l.c.*), that it is a fashion of the decade after the middle of the century.

<sup>18</sup> Besides the head-cups (I have not been able to find the illustration of Berlin, inv. 4495, *JHS.* lii, 1932, pp. 175 and 183; Neugebauer, *Führer*, p. 69) outline drawing occasionally appears on other kinds of vases, e.g. on an amphora and a neck-amphora by the Amasis painter.



## EROS AND THE WOUNDED LION

THERE is a small group of gems, two of them belonging to the University of Michigan, which has not yet received the slight attention that its subject merits.<sup>1</sup> Aesthetically considered, not one of the six could win the approval of the distinguished critic who is honored in this number of the JOURNAL; but all illustrate a curious mingling of motives which is not without interest. The subject is a lion holding out a wounded forepaw to be tended by a kneeling winged figure, apparently Eros.

The best known of these stones is a carnelian in the Berlin Museum (3033), briefly described by Furtwängler (fig. 1).<sup>2</sup> Here the lion is seated, with a small tree behind him, and Eros is bandaging the forepaw which the animal extends to him. Another, in the Thorvaldsen Museum at Copenhagen, a small banded agate, has two subjects: below, Capricorn with a star over his head, above, Eros and the lion, sitting, as on the Berlin stone.<sup>3</sup> Fossing describes Eros as bandaging the lion's forepaw; this cannot be seen clearly on the plate. The presence of Capricorn, a sign of the zodiac, may be worth noting, for in all the remaining gems of the group, as will be seen, the lion is marked as a symbol of the sun.



FIG. 1  
CARNELIAN: BERLIN  
(After Furtwängler,  
Beschreibung)

A mottled green and yellow jasper in the Southesk Collection is described as follows:

Solar lion, freed from a thorn by Eros. *Obv.*: Lion (r.) with seven-rayed crown; standing, tail erect; Eros (l.), winged, kneeling on one knee, and with right hand drawing thorn from lion's raised forefoot; above lion, eight-rayed star. *Rev.* MAPMAPAXΩΘ.<sup>4</sup>

Two or three points require brief comment. There are seven rays round the lion's head, but it is a little misleading to speak of a crown. The action of Eros, to judge from the plate, is not quite clear; but one must accept the author's account of the original, and the point is of little importance, extraction of the thorn or splinter and bandaging the injured foot being merely two stages of the same process. The inscription should have been MAPMAPAYΩΘ; the engraver carelessly cut X for Y.

A yellow jasper in Berlin seems to be much like the Southesk stone.<sup>5</sup> Toelken described the design as a standing lion, with seven rays round the head, roaring and

<sup>1</sup> To Miss Louise Shier, Assistant Curator of our Museum of Archaeology, I am indebted for the casts of the two Michigan stones; they were photographed by George R. Swain.

<sup>2</sup> Furtwängler, *Beschreibung der geschnittenen Steine*, No. 3033, pl. 25; *Die Antiken Gemmen* i, pl. 46, 18, ii, 222.

<sup>3</sup> P. Fossing, *Catalogue of the Antique Engraved Gems and Cameos*, No. 1727, pl. 20.

<sup>4</sup> *Catalogue of the Collection of Antique Gems Formed by James, Ninth Earl of Southesk*; edited by Lady Helena Carnegie: i, N68, pl. 14.

<sup>5</sup> Toelken, Class IX, 111 = Winckelmann, Class II, 661. Winckelmann describes the Eros as drawing a thorn from the lion's paw. The stone is not included in Furtwängler's *Beschreibung*, nor in his *Antike Gemmen*. It is apparently the same as that listed in the *Ausführliches Verzeichnis* of the Egyptian antiquities, 380, No. 9872.



holding a forepaw out to a winged Eros, kneeling before him, who seems to be bandaging it. The reverse is inscribed Μαμαραωθ.

Michigan 26112 is a deep-red jasper, a horizontal oval, like most of these stones, measuring now 17 x 12 mm., but originally larger (fig. 2). It was bought in Egypt. A standing lion rests his right forepaw in the right hand of a kneeling winged figure, who holds in his left a large splinter or thorn which he has drawn from the wounded paw. There is an eight-rayed star over the lion's head and a crescent moon over his back. A comb-like, five-pointed ridge on the lion's head may have been meant for the rays that appear on other specimens. The work is very crude, and the stone has been damaged by grinding down the edge after the design was finished. The process removed the tips of the figure's wings, his left leg from the knee down, which rested on the ground, and almost destroyed the erect end of the lion's tail. The reverse bears the inscription Βαινχιωωαχ|βρηθ. In Βαινχιωωαχ Egyptologists have recognized the words for "soul of darkness," apparently applied to the sun;<sup>6</sup> and βρηθ is a phonetic variant for φρη, "the sun," with parasitic θ, which was often added to magical words ending in a vowel, perhaps to give them the appearance of a Semitic origin.<sup>7</sup>

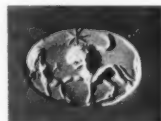


FIG. 2  
RED JASPER:  
UNIVERSITY OF  
MICHIGAN

The last of the group, Michigan 26127, is a yellow jasper from Syria, horizontal oval, 18 x 14 mm. (fig. 3).<sup>8</sup> The lion, standing, holds out his right forepaw to the kneeling Eros, who is drawing from it a large thorn or splinter, clearly visible on the stone. Over the lion's head are a large disk or globe and six rays.<sup>9</sup> On the reverse, Μαμαραωθ.<sup>10</sup>



FIG. 3  
YELLOW JASPER:  
UNIVERSITY OF  
MICHIGAN

A design representing a human figure handling a lion's wounded paw could not fail, at the time when these gems were cut (second or third century A.D.), to call to mind certain popular stories about wounded lions that sought aid from men and showed their gratitude in various ways. A short passage in Pliny (*NH.* 8, 56) is typical of these stories:

<sup>6</sup> Erman, *Religion der Aegypter*, p. 405, end.

<sup>7</sup> See, however, W. W. Graf von Baudissin, *Studien zur semitischen Religionsgeschichte* i, 194 f. (§ 28).

<sup>8</sup> This stone, together with the greater part, but apparently not the whole, of the Ayvaz collection to which it belonged, was sold to the University of Michigan in 1941, since which time the right of publication has rested with the University. Nevertheless, there appeared in 1944, Fascicle 6, Vol. xxv of the *Mélanges de l'Université Saint Joseph*, at Beyrouth, containing a work by R. Mouterde, S.J., called "Objets magiques: Recueil S. Ayvaz," bearing the date 1942-1943. An inquiry directed to Fr. Mouterde elicited an explanation which clears him from blame, but not the vendor. The previous owner had shown Fr. Mouterde the amulets from time to time in 1938-1940, and the latter had planned a catalogue to be published in the *Mélanges*. After the sale Fr. Mouterde asked the vendor whether the gems had been offered to any scholar who would wish to publish them. A negative answer to this question was returned, whereupon, since his work had made considerable progress and further inquiry was impracticable on account of the war, Fr. Mouterde proceeded with a publication somewhat less extensive and detailed than had been originally planned. No comment upon the vendor's conduct is needed.

<sup>9</sup> Mouterde (*op. cit.*, p. 116, No. 31) wrongly describes the disk as placed between two uraei. There is only a ray at each side of the disk.

<sup>10</sup> "Lord of lords (lordships)" or "lord of luminaries"; see Brockelmann, *Bonner Jahrb.* civ, p. 193; Jacoby, *Arch. für Rel.-Wiss.* xxviii, p. 279; M. Schwab, *Vocab. de l'angéologie*, 410 (*Mém. Acad. Inscr.* x). The inscription belongs particularly to solar designs.



*Mentor Syracusanus in Syria leone obvio suppliciter volutante attonitus pavore, cum refugienti undique fera opponeret sese et vestigia lamberet adulanti similis, animadvertit in pede eius tumorem vulnusque. extracto surculo liberavit cruciatu. pictura casum hunc testatur Syracusis.*

The last sentence shows that the theme was taken up by artists of the late Hellenistic and Roman periods.

Much more elaborate and circumstantial is the famous story of Androclus and the lion, told at length by Aulus Gellius (5, 14) and Aelian (N.A. 7, 48). Gellius took the tale from the *Aegyptiaca* (Book 5) of Apion (fl. ca. 30 A.D.); Aelian's version closely resembles that of Gellius, yet seems not to have been drawn from Apion. In an admirable monograph August Marx has shown that both versions are merely forms of the widely diffused folk-tale of the Grateful Beast, given the semblance of truth by attaching the incident to definite persons and places.<sup>11</sup> In view of the popularity of such stories it is surprising that—to the best of my knowledge—no work of ancient art has been preserved showing an ordinary human being in the act of relieving the wounded animal.

To explain the substitution of a winged Eros for a man, it seems necessary to assume the interplay of another motive, one of the many "Sports of Love." In one of his *Dialogues of the Gods* (12, 2) Lucian makes Eros boast that he is not afraid to ride the lions of Rhea, and tells how the beasts fawn upon him and lick his hand. Several gems actually show the young god riding a lion.<sup>12</sup> This would be enough to explain such a design as that of the Berlin carnelian, where, one may say, Eros, like a good master, is tending the wound of his steed.

However, on four, perhaps five of these six stones the animal is not an ordinary lion but the symbol of the sun, as is shown by its radiate head, by a star and crescent in the field, or by the presence of a zodiacal symbol, and particularly by the disk over the lion's head on the Michigan yellow jasper. It may be suggested that Eros is simply retained in the composition when the animal is transformed into the solar lion. But there are many glyptic examples of the solar lion alone,<sup>13</sup> radiate or with moon and star above him, and Eros is not necessary to the design.

Here enters still another motive, of religious character. In Egypt the lion was associated with the sun from very ancient times,<sup>14</sup> and in the Roman period magical amulets show the young sun-god Harpocrates bestriding a lion or standing on the back of the running animal.<sup>15</sup> Further, there is a tendency to assimilate Harpocrates to Eros, which expresses itself in the minor arts, and has not escaped the attention of archaeologists.<sup>16</sup>

<sup>11</sup> A. Marx, *Griechische Märchen von dankbaren Tieren*, Stuttgart, 1889, pp. 55–63.

<sup>12</sup> See, for examples, Walters, *Catalogue of Engraved Gems in the British Museum*, No. 1486, pl. 20; 2852–54, pl. 30; Fossing, *Cat. Thorevaldsen Museum*, 731, where still other specimens are cited.

<sup>13</sup> E.g., B. M. Cat. 2320. There are three specimens in the Michigan collection: 26050, 26098, 26154.

<sup>14</sup> Budge, *The Gods of the Egyptians* ii, 360; Hopfner, *Der Tierkult der alten Ägypter*, 40–47 (*Denkschr. der Wiener Akad.* lvii, 2, 1914).

<sup>15</sup> De Ridder, *Coll. De Clercq* vii, 766 (No. 3444, pl. 28); Metropolitan Museum, 81.6.294 (unpublished). Cf. Montfaucon, *L'antiquité expliquée* ii, 2, pl. 149, 6 (from Chiflet, *Abraxas Proteus*, pl. 10, 40, incorporated in the now rare volume *Abraxas*, by Macarius [L'Heureux], Antwerp, 1657).

<sup>16</sup> Perdrizet, *Les terres cuites de la Collection Fouquet*, 33 (No. 99, 100; pl. 27); Pieper, *Mitteil. des deutsch. Inst. in Kairo* v, 140, No. [97] 69, pl. 22b.



Here, then, we seem to have an adequate explanation of the presence of an Eros-like deity with the lion of the sun. Some authorities, it is true, are disposed to treat the solar lion as Mithraic rather than Egyptian. In view of the ancient connection in Egypt between the lion and the sun, the Mithraic hypothesis is unnecessary, all the more because Egyptian types penetrated neighboring lands to a surprising extent. Yet it is possible that there was a rapprochement between Eros and Mithras like that between Eros and Harpocrates. Reitzenstein has argued plausibly that a Soul-goddess (Psyche) played a part in Mithraic cosmogonies;<sup>17</sup> Mithras, in the character of Eros, may perhaps be regarded as her counterpart.<sup>18</sup>

UNIVERSITY OF MICHIGAN

CAMPBELL BONNER

<sup>17</sup> *Das Märchen von Amor und Psyche*, pp. 79 ff.; "Die Göttin Psyche," *Sitzungsber. Heidelb. Akad.* 1917, Abh. 10.

<sup>18</sup> Since this paper was sent to the editor I have found two related items in Maffei's *Gemme Antiche*: (1), Vol. iii, 17, fig. 15, carnelian. Lion sitting, holding out wounded forepaw to kneeling Eros, as in the Berlin carnelian; but there is no tree. The engraving is influenced by the style of the period (1707-1709), and is probably inaccurate. (2), Vol. iv, 13, fig. 16, emerald. Lion walking to right, man behind him, right hand on lion's rump, as if to push him forward. Maffei calls the group "Androclus with the lion"; but there is no indication of the wounded paw, and the man might be any lion-tamer.



## GANDHĀRA AND EARLY CHRISTIAN ART: BUDDHA PALLIATUS

THE resemblance of certain Gandhāra statues of the Buddha, such as those excavated at Hadda in Afghanistan, (fig. 1.) to early representations of Christ has long been noticed (fig. 2), as has the fact that both types apparently spring from the Greek orator type as exemplified by the Sophocles of the Lateran.<sup>1</sup> In these Buddha figures the garment worn is unmistakably a *himation* and not the regular *saṅghāṭī*: even though the undergarment visible in some of these statues suggests the tunic worn under the Roman toga, this mantle should, as will be explained directly, be described as a *himation* or *pallium* from the association of this dress with the ancient philosophers.<sup>2</sup> The various personages in antique sculpture with the right hand emerging from the *himation* or *pallium* illustrate a style of wearing the garment that prevailed in every quarter of the Late Antique world: it is paralleled at once in the Buddhas of Gandhāra, in Roman portrait statues, portrayals of Christ, and in the countless grave reliefs of Palmyra.<sup>3</sup> The fact that the *pallium*, draped in such a way that the right arm was supported as though muffled in a sling, continued to be worn until at least the fourth century is illustrated in many portrait statues, notably the effigy of Julian the Apostate in the Louvre.<sup>4</sup> It was not a prevailing fashion of dress, however, but the association of this costume with ancient representations of philosophers and teachers that led to its adaptation to the early images of Christ and Buddha.<sup>5</sup> However, the resemblance between the first statues of Christ and Buddha is not at all surprising if we consider that both are the result

<sup>1</sup> H. Graeven, "Ein Christustypus in Buddhafiguren," *Oriens Christianus* 1901, pp. 159-167; L. Bréhier, *L'art chrétien*, Paris, 1928, p. 50, etc. The German scholar of liturgical vestments, Father Braun, describing a typical Gandhāra Buddha, has written: "Es sind merkwürdige Darstellungen, die nicht selten wie ein getreues Bild eines christlichen Priesters aus altchristlicher Zeit in seiner liturgischen Gewandung aussehen." J. Braun, *Die Liturgische Gewandung*, Freiburg, 1907, p. 243.

<sup>2</sup> The word *pallium* used here is not to be confused with the Christian vestment, the *pallium* or *palla*, with which, so far as the writer has been able to discover, it has no connection. The classical word *pallium* in classical Latin meant any kind of a covering, garment, or a mantle; it was, too, the equivalent of the Greek *himation* which differed from the Roman toga in being a rectangular piece of cloth and not rounded or semicircular like the toga. The *himation* or *pallium*, which we may conclude from what follows, is the garment worn by the Sophocles of the Lateran and the Aeschinus of the Naples Museum, was, as Tertullian tells us, particularly reserved for philosophers, orators, poets, etc. (J. Wilpert, "Neue Monumente zur Symbolik des heiligen Palliums," *Römische Quartalschrift* ii/iii, 1926, p. 96); Pliny (*NH.* xxxv, 40), implies that "*palliatus*" was a regular synonym for philosopher. Although at first held in contempt by the Romans, this garment later replaced the toga in popularity. The *pallium-himation* was international in popularity in contrast with the national character of the Roman toga. Worthy of note with regard to Christ's dress is Wilpert's statement (*I sarcofagi cristiani antichi* ii, Rome, 1932, p. 6): "Mai il Signore porta la toga, come qualcuno ha supposto."

<sup>3</sup> L. M. Wilson, *The Roman Toga*, Baltimore, 1924, pp. 31, 32; figs. 9-13. H. Ingholt, *Studier over Palmyrensk Skulptur*, Copenhagen, 1928, pl. II, 1 and 2; IV, 3; V, 2, 3, etc. See C. R. Morey, *Early Christian Art*, Princeton, 1942, fig. 20, for a Palmyrene bust dated 180 A.D., and H. Buchthal, "Foundations for a Chronology of Gandhāra Sculpture," *Transactions of the Oriental Ceramic Society* 1942-1943, London, 1944, pl. 6c, for an illustration of a funerary monument from Palmyra in the Copenhagen Glyptothek.

<sup>4</sup> H. Peirce, and R. Tyler, *L'art Byzantin* i, Paris, 1932, pl. 28.

<sup>5</sup> On Quintilian's associating this confining type of toga with orators, see *Institut. Orator.* xi, 3, 138 (L. M. Wilson, *loc. cit.*) What Bréhier (*op. cit.*, p. 50) says about the Christ figure in relation to the antique philosopher type can be applied equally well to the evolution of the Buddha from the orator



of closely parallel philosophic concepts in the religious complex of the Graeco-Roman orbit: Justin had stated that Socrates was the "best" of the classic philosophers, since he denied the ancient gods and enjoined man to seek the unknown god in the Logos; he therefore urged his followers to know Christ as the personal appearance of the Logos indwelling in all people.<sup>6</sup> The implication that Christ is of the line



FIG. 1.—BUDDHA FROM HADDA, AFGHANISTAN, THIRD-FOURTH CENTURY A.D., KABUL MUSEUM



FIG. 2.—SARCOPHAGUS FROM PSAMATIA, KAISER FRIEDRICH MUSEUM, BERLIN

type: "Sur toutes ces oeuvres on trouve une ressemblance d'attitude qui ne peut être l'effet du hasard: le bras droit enroulé dans les plis de l'himation avec la main posée sur la poitrine, le bras gauche rejeté en arrière et appuyé à la hanche, tout le corps portant sur la jambe gauche et légèrement renversé, la physionomie grave et méditative qui force l'attention des auditeurs, tels sont les traits qui distinguent le type abstrait du philosophe ou du docteur."

<sup>6</sup> One is tempted to draw a parallel between this concept and the *Nirmāṇakāya* and *Dharmakāya* of Buddhism.



of the great classic teachers is almost too obvious. Augustine again draws a parallel between Christ, the Master of the new doctrine and the ancient philosophers: *paucis mutatis verbis*, he says, in speaking of Plato, *atque sententiis Christiani fierent*.<sup>7</sup> Christ the Paedagogue is here again thought of as replacing the teachers of the ancients.<sup>8</sup> Concepts of this sort made it natural to represent the great teacher of Christianity in the iconography of the "teacher-orator" of the classic world.<sup>9</sup> It seems almost redundant to point out that, in a similar way, Buddha was regarded as the great teacher, the denier of the ancient order as represented by the Vedas: the Graeco-Roman workmen who fashioned his images in Gandhāra, like their Early Christian cousins, chose the classic orator type as the most suitable for portraying the Teacher, the "Logos" of the Eastern world.<sup>10</sup> Father Braun states that the philosopher's gown was worn by holy men in the Roman Christian world of the second and third centuries and that it was regarded as a garb of honor.<sup>11</sup> As Bréhier has demonstrated, there was nothing unusual in the selection of the pagan orator type for the representation of our Lord, who was Himself the supreme teacher, the eternal "Paedagogue."<sup>12</sup>

It is eminently worthy of note that, in both the Buddha and Christ image, a youthful *ephēbe* type is substituted for the mature bearded faces of the orators. It has been suggested that the Early Christian representations of Christ as a young man with long hair are taken over from earlier Apollonian prototypes.<sup>13</sup> Our Lord's Resurrection is the sun's rising; His descent into Hell the setting of the orb beyond the Western rim.<sup>14</sup> The analogy to the daily and eternal course of Helios-Apollo is

<sup>7</sup> F. Saxl, "Frühes Christentum und spätes Heidentum in ihren kunstl. Ausdrucksformen," *Wiener Jahrbuch für Kunstgeschichte* ii, 1922, p. 68. In the pre-Constantinian period Christ is the true philosopher who leads men back to the true Paradise lost by the sin of Adam. The earliest Christian symbol of this concept is the Good Shepherd; at the same time, *Christus philosophicus* is shown instructing his followers in the true doctrine. See F. Gerke, *Christus in der Spätantiken Plastik*, Berlin, 1940, p. 7.

<sup>8</sup> On a sarcophagus from Monastirine, now in the museum at Salona, Christ, wearing the philosopher's gown and surrounded by a host of children, is portrayed as the divine Paedagogue. See O. Wulff, *Altchristliche und Byzantinische Kunst* i, Berlin, 1914, Abb. 167, pp. 173-174.

<sup>9</sup> So also St. Justin preached the Word of God clad in the philosopher's gown.

<sup>10</sup> "Buddha und Christus sind gleichermaßen Antipoden des Heros klassischer Prägung. Jüdisch-hellenistischer und indisch-hellenistischer Spiritualismus haben die Welt erobert." (F. Saxl, *Mithras*, Berlin, 1931, p. 107). It must be strongly emphasized that, at about the same time or slightly earlier, the Buddha was being portrayed as a Yaksha in the studios of Mathurā. The independent origin of these first truly Indian "portraits" of Śākyamuni is beyond question, since they have nothing to do with either the style or concept of the Gandhāra Buddhas.

<sup>11</sup> Braun, *op. cit.*, pp. 65, 657.

<sup>12</sup> Bréhier, *op. cit.*, p. 50. See also Clement of Alexandria, *Paedagogus* i; I am indebted for this last reference to my friend Alfonso Ossorio. See also W. Elliger, *Zur Entstehung und frühen Entwicklung der altchristlichen Bildkunst*, Leipzig, 1934, pp. 247 ff.; Gerke, *op. cit.*, pp. 10, 12, 77.

<sup>13</sup> For the stylistic aspect of this borrowing, see H. Dutschke, *Ravennatische Studien*, Leipzig, 1909, p. 117. The Apollonian Christ type, as seen in a sarcophagus in the Lateran (Gerke, *op. cit.*, Abb. 53-55) seems to be a borrowing from the archaistic Apollo bronzes of the Naples Museum; generally, the Buddha heads are more closely related to the Apollo Belvedere, the *krobylos* forming a ready-made shape for the *uṣṇīṣa*. (See A. Foucher, *L'art Gréco-Bouddhique du Gandhāra* ii, Paris, 1918, pp. 296 ff., etc.). Although he refers to youthful representations of Christ as "Apollonian" in spirit (p. 42), Gerke never specifically suggests an Apollo type as a model. Presumably the deification of Christ, which took place in the fourth century and which we can see in the emergence of the *Maiestas Domini* concept, demanded a "supernaturally" beautiful representation of the Lord of the World.

<sup>14</sup> W. J. A. Visser, *Die Entwicklung des Christusbildes in Literatur und Kunst in der frühchristlichen und frühbyzantinischen Zeit*, Bonn, 1934, p. 57. See also M. Didron, *Christian Iconography* i, London, 1851, p. 149, n. 2, and B. Rowland, "Buddha and the Sun God," *Zalmoxis* 1, 1938, p. 73.



apparent at once. Beyond this there are many descriptions in the Gospels and the writings of the church fathers that, by the luciferous character attributed to Christ, must have suggested the pagan images of the Sun God as models for representing Him.<sup>16</sup> A similar choice of the classic Sun God as the type for the Buddha may naturally have suggested itself to the Eurasian artisans who carved the images of Gandhāra from the frequent allusions to the Buddha's solar character in the *sūtras*.<sup>16</sup>

As far as we can say at the moment, Śākyamuni must have been represented in the guise of Sophocles and Aeschinus at the same time that Christ was given a similar anthropomorphic representation.<sup>17</sup> We may be justified in assuming that the iconographic type was introduced from the Roman Orient. Again, the stylistic parallels between this type in the East and West are as close as the spiritual similarities suggested by the literary sources mentioned above: the Buddha in our illustration has—as is only to be expected—the same sharp and linear caricature of the form-fitting robe of the Hellenistic orator type that we find in the well-known example from Psamatia (fig. 2) and in a sarcophagus from Clermont-Ferrand.<sup>18</sup> As I have already stated in an earlier publication, the Buddhist sculpture of Gandhāra is certainly derived from Roman Imperial art.<sup>19</sup> Hugo Buchthal, in a recent article, reaches essentially the same conclusion, although we disagree on the exact date of the productions of the Northwest Indian centers of sculpture.<sup>20</sup> We have already examined at length the probable iconographic reasons for the selection of the figure wearing a *pallium* for representations of Christ and Buddha. It seems just as likely that a Palmyrene grave relief with a figure clad in the *himation* could be the *stylistic* prototype for both the Christ figure and the Buddha image.<sup>21</sup>

FOGG MUSEUM OF ART

BENJAMIN ROWLAND, JR.

<sup>16</sup> I need mention only Our Lord's "glory," referred to so often in the Gospels (*John* i, 14, etc.) or that His face "did shine as the sun." (*Matthew* xvii, 2). St. Ambrose, indeed, addresses Christ directly as "Sol";

*Splendor paternae gloriae,  
de luce lucem proferens,  
Primordiis lucis novae  
diem dies illuminans.*

*Verusque sol illabere,  
micans nitore perpeti, etc. (Hymnus Matulinus, No. vii).*

I may mention also St. Paul (i *Ad Timoth.*, vi, 15–16):

*"Solus potens, rex regum et dominus dominantium, qui  
solus habet immortalitatem et lucem habitat inaccessibilem."*

<sup>16</sup> The following quotations will illustrate this point:

"The Buddhas shine both by night and by day." (*Dhammapada* xxvi, 387, 5. E. W. Burlingame, "Buddhist Legends," *Harvard Oriental Series* 30, 1921, p. 278).

"Like the Sun bursting from a cloud in the morning, . . . so he, too, when he was born from his mother's womb, made the world bright like gold; . . . dispelled the darkness." (*Buddha-carita* i, 26. *Sacred Books of the East* xlix, I).

"He shone like the young sun descended upon the earth" (*Ibid.* i, 31).

"He will shine forth as a sun of knowledge to destroy the darkness of illusion in the world." (*Ibid.*, i, 74).

<sup>17</sup> I add as a final note on the Christ-Philosopher type the mention by the Gnostic Marcellina that in the Lararium in Alexandria there were set up and venerated "*imagines Jesu et Pauli et Homeri et Pythagorae*." Cf. Dutschke, p. 101.

<sup>18</sup> B. Rowland, "Gandhāra and Late Antique Art: the Buddha Image," *AJA.* xlv, 1942, pp. 223–236.

<sup>20</sup> H. Buchthal, *op. cit.*, pp. 21–32.

<sup>21</sup> *Ibid.*, pl. 6c.



## FRAGMENT OF A CONSULAR DIPTYCH

THE Walters Art Gallery possesses a fragment <sup>1</sup> of a consular diptych (fig. 1), which was apparently unknown to Delbrueck, since it does not figure in his invaluable corpus of these ivory diptychs.<sup>2</sup> It is related very closely to another relief published by Delbrueck,<sup>3</sup> which was found at Ostia along with some bronze coins. Since the Ostia ivory is in a poorer condition, owing to its having been buried in the earth, the Walters fragment deserves to be mentioned in the literature on ivory diptychs. Its previous history is not known beyond its acquisition by Mr. Henry Walters in 1925 from a New York antiquarian. Faint traces of writing on the reverse, however, would indicate that like many of these diptychs it had been in use in a church as early as the sixth century.

The consul is seated under an arch and looking somewhat downward and to his right.<sup>4</sup> He wears a tunic and the pallium and carries in his right hand a consular diptych with a top shaped very like the leaf in Ostia. The archway is composed of two columns with very decadent acanthus capitals and an arcuated arch with brickwork above. At the right is a hole and traces of another, the means of attaching the leaf to its mate, a similar pair of holes appearing at both the top and bottom of the Ostia diptych. The reverse is grooved at the sides and with a series of lines scratched across it to give spacing for writing. There are traces of writing, visible under ultra-violet light, of two different epochs. A few words only can be made out (see fig. 2). The earlier writing, according to Miss Dorothy Miner, is uncial of the sixth century with a ninth-century script written over it.

The Ostia leaf and the Walters fragment are very closely related. Not only is the same flat style typical of both, but also the manner of rendering the drapery, the curious hands with long fingers, the brickwork at the top of each, are all the same and the consul in the latter holds a diptych with a top shaped like the one in Ostia. In fact, they are so closely related that they unquestionably issued from the same workshop.

Delbrueck connects, quite rightly, the Ostia relief with the mid-fifth century stucco reliefs in the Baptistery at Ravenna.<sup>5</sup> An even closer comparison, it seems to me, is with miniatures in the Codex Romanus in the Vatican, such as the portrait of Virgil.<sup>6</sup> The same flat modelling of the drapery, similar hands with long fingers, the same rendering of the hair and eyes typify both the miniature of Virgil and the two reliefs of the consuls. Delbrueck suggests an origin of the Ostia ivory in Rome, since it was found nearby. The indications of style would, on the other hand, rather place the origin of the two ivories — or at least the school from which they come —

<sup>1</sup> 71.304. Acq. 1925. W.085; H.103. <sup>2</sup> It is unquestionably genuine in the writer's opinion.

<sup>3</sup> R. Delbrueck, *Die Consulardiptychen und verwandte Denkmäler* (Studien zur Spätantiken Kunstgeschichte 2), Berlin, 1929, no. 65A, p. 256 and pl. 4.

<sup>4</sup> This seems to be the only way to explain certain folds of the drapery in the lower part of the fragment. It would mean that the diptych would have been of a small size, even allowing for a cresting of some sort at the top having been cut off in the past.

<sup>5</sup> Delbrueck, *op. cit.*, p. 257. For illustrations see H. Peirce and R. Tyler, *L'art byzantin*, Paris, i, 1932, pl. 138.

<sup>6</sup> Peirce and Tyler, *op. cit.* i, pl. 106.





FIG. 1.—FRAGMENT OF CONSULAR DIPTYCH. WALTERS ART GALLERY,  
BALTIMORE

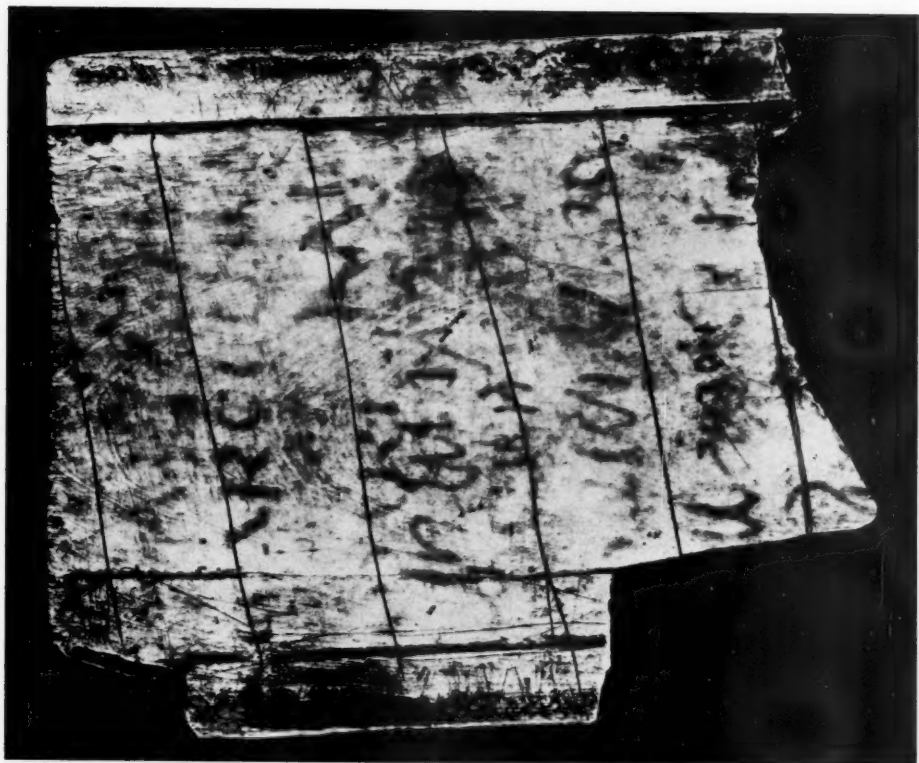


FIG. 2.—FRAGMENT OF CONSULAR DIPTYCH. REVERSE AS SEEN UNDER VIOLET  
LIGHT. SLIGHTLY ENLARGED. WALTERS ART GALLERY, BALTIMORE



in the provinces. Morey<sup>7</sup> has noted the extreme provincialism of the miniatures in the Codex Romanus. Soper,<sup>8</sup> in writing of the Italo-Gallic school, notes that the careful rendering of brickwork as on the Walters ivory, although found in Rome (i.e. on the wooden doors of Santa Sabina) is rather a provincial trait at this period. The very flat arcuated lintel found here is to be seen on a coin of Salinina representing a Gallic temple.<sup>9</sup> Brown further points out that the use of a figure standing under an arcuated lintel is usually indicative that the personage is superior to ordinary mortals (the emperors, etc.), the only exceptions being provincial, as on the Gallic ivory diptych now at Bourges.<sup>10</sup> Also the smaller diptychs published by Delbrueck, such as the one at Bourges,<sup>11</sup> seem generally to be Gallic in origin. The rendering of the hair on the two ivories under discussion may be compared with that on a figure on a Gallo-Roman bas-relief<sup>12</sup> in the Museum at Sens. All these comparisons appear to point to a provincial origin for these two ivories, if not for the actual place where they were carved, at least for the origin of the style which is peculiar to these two panels among the published consular diptychs.

The Walters fragment has no indication of the name of the consul or the emperor in whose time he served. Delbrueck was unable to identify the consul "Modestus" on the Ostia relief. He suggested, however, that the "C. L. Severus" might be the Cassar Libius Severus who was proclaimed emperor at Ravenna in 461 and died at Rome in 465.<sup>13</sup> This double connection with Ravenna and Rome might easily be the explanation why an ivory carving of a consul so closely related to the Italo-Gallic school of Early Christian art should be found so near Rome. The style fits in admirably with the date, as witness the stuccoes at Ravenna which usually are assigned to the second half of the fifth century. Thus the consular ivory in Baltimore adds one more example to the growing group of art objects that is being assigned to the Italo-Gallic school of craftsmen working during the fifth century and helps to complete the picture of the consular diptychs of the period.<sup>14</sup>

WALTERS ART GALLERY

MARVIN CHAUNCEY ROSS

<sup>7</sup> C. R. Morey, *Early Christian Art*, Princeton, N. J., 1943, p. 48.

<sup>8</sup> A. C. Soper, "The Italo-Gallic School of Early Christian Art," *The Art Bulletin* xx, 1938, p. 154.

<sup>9</sup> D. Brown, "The Arcuated Lintel and its Symbolic Representation in Late Antique Art," *AJA.* xlv, 1942, p. 393.

<sup>10</sup> Brown, *op. cit.*, p. 398.

<sup>11</sup> Delbrueck, *op. cit.*, no. 37.

<sup>12</sup> E. Espérandieu, *Musée Gallo-Romain de Sens (Ext. du Recueil Générale des Bas-Reliefs, Statues et Bustes de la Gaule Romaine)*, Paris, 1922, no. 2806, p. 35.

<sup>13</sup> T. Hodgkin, *Italy and her Invaders (376-476)* ii, Oxford, 1880, p. 438.

<sup>14</sup> O. M. Dalton, *Byzantine Art and Archaeology*, Oxford, 1911, fig. 386. This seems to be an imitation in terracotta of an ivory diptych of the style close to the Ostia and Walters ivories.



## THE ALPHABET IN ITALY

TO JUDGE from the contents of the Etruscan tombs, it was not until the seventh century B.C. that Etruria became an open market for Greek commerce. The latest student of the material, Edith Hall Dohan, in her extremely competent and valuable study of *Italic Tomb-Groups in the University Museum*, came to the conclusion that it was during the period 680–650 B.C. that “foreign influence penetrated deeply into Central Italy.”<sup>1</sup> This should be the period to which Herodotus was referring when he asserted<sup>2</sup> that the Phocaeans of Asia Minor “were the first among the Greeks to undertake long voyages; and it was they who disclosed Adria and Etruria and Spain and Tartessos, traveling not in merchant-tubs but in fifty-oared ships.” For nearly a century and a half thereafter, Greek-Etruscan trade flourished without recorded interruption or hostility. Then, in 535 B.C., after many of the Phocaeans had abandoned their Asia Minor home through fear of their new Median overlord and migrated to their twenty-year-old colony of Alalia in Corsica, the Greek infiltration close to the Elba mines and the passage between the Tyrrhenian and Ligurian Sea, aggravated by *hybris* toward the natives, brought an Etruscan-Carthaginian alliance against them with a navy which the Alalians were able to defeat only at cost of their own men-of-war. The Etruscans conveyed their Greek captives from this engagement to their port of Agylla below Caere and there stoned them to death; while the doubtfully victorious Phocaeans, correctly appraising the situation, withdrew from Corsica to southern Italy with their families and all the possessions which they could load on their few remaining ships, and founded Velia. Thus ended the Phocaean chapter in the Greek exploitation of the West.

Etruscan ill-will, once kindled against the Greeks, spread to Cumae outside the Gulf of Naples, now the northernmost outpost of Greek trade in the Tyrrhenian Sea. In 524 the Etruscans of Capua, taking with them Dauni and Aurunci tribesmen, made an unsuccessful assault on Cumae, which in turn proceeded to ally itself with the Latin League to defeat the Etruscans at Aricia and break their hold on Rome. Previously, Cumae contacts had been more with the interior of Campania and extended across to eastern Italy on the Adriatic. It is not until these events of the last quarter of the sixth century that we are entitled to postulate any very direct or very intimate cultural relations between Greeks and Latins.<sup>2a</sup>

But Greek trade with Etruria survived these vicissitudes. Continued importation of Attic ware is attested by the contents of the Etruscan tombs; and the strong formative influence of Attic art on Etruscan wall-painting proves how close the contact must have been. The final cessation of relations came with the Persian War and its concomitant Punic-Etruscan alliance against the Greek towns of Sicily, culminating in the crucial naval battle off Cumae in 474 B.C. Thereafter, to its own cultural detriment, the failing Etruscan empire looked north and sought to compensate itself beyond the Apennines, while on the south it wholly abandoned Greece

<sup>1</sup> *Op. cit.*, p. 109.

<sup>2</sup> I, 163.

<sup>2a</sup> Cf. *Mon. Ant.* xxii, 1913, coll. 399 f., for absence of “Cumae” material in early Latium.



in favor of Carthage which by now completely controlled the Spanish and Atlantic trade.

Commercial relations between Etruria and Greece had thus lasted almost precisely two centuries, from ca. 680 to 474 B.C. Early in that span of years the Etruscans had learned the Greek alphabetic signs. Attic influence had come too late to count in this regard. The Phocaeans had arrived early enough; but it was not they who taught the Etruscans their letters. At the start, it was Corinthian pottery which bulked largest in the Etruscan importation of Greek wares. Payne<sup>3</sup> reported for Corneto "great quantities, especially early Corinthian" and stated that "Caere and Vulci have probably produced more Corinthian vases than any other Italian sites." Etruscan imitations of Protocorinthian and especially Corinthian are innumerable. Though Greek Protocorinthian almost never carried any written legend, imported Corinthian was copiously adorned with writing. And it is precisely at the turn from Protocorinthian to Corinthian, around the middle of the seventh century, that Etruscan familiarity with alphabetic writing is first attested by the tomb-finds. Yet the Etruscan script is not Corinthian—and this in spite of the later tradition recorded by Tacitus<sup>4</sup> that it was the Corinthian Demaratus who taught the Etruscans their letters, and in spite of the obvious opportunity which Corinthian pottery afforded Etruscan eyes to become familiar with Greek script. How is the anomaly to be explained?

There is a comparable situation in Sicily. There, too, a primary alphabetic influence should have been Corinthian; certainly so at Syracuse, the great Corinthian colony in the West. Yet there is not a shred of evidence to suggest that the Syracusan script was ever Corinthian. To be sure, we are very inadequately supplied with early Syracusan material. But there is the partly effaced dedication on the top step of the old Apollo temple (fig. 1a).<sup>5</sup> However troublesome it may be to read, its alphabetic affinities are clear and its un-Corinthian status indisputable. For the early fifth century there are Gelon's tripod bases at Delphi (fig. 1b) and Hieron's helmet from Olympia (fig. 1c), as well as the archaic Syracusan coins, all in sufficient agreement to prove that the inscription on the temple step is native to its town. An exemplary Syracusan inscription, likewise from the first half of the fifth century (fig. 1d), has not been generally recognized as such, being classified as Arcadian for no better reason than the Mantinean origin of its dedicator Praxiteles, who proclaims himself a Syracusan and Camarinan and may properly be expected to use a script appropriate to the Sicilian towns from which he made his dedication. Altogether, the material from the late sixth and early fifth centuries is sufficient to demonstrate the epichoric character and give us the surprising assurance that, during that period at least, Syracuse, the Corinthian colony, did not employ the Corinthian script. But neither did Syracuse take her letters from her rival of approximately equal age, Chalcidic Cumae (the L, M, and S are crucially different), nor did she accept the Ionic tradition which, except through Phocaea, took no early hold in the West.

<sup>3</sup> *Necrocorinthia*, p. 189.

<sup>4</sup> *Annals* xi, 14.

<sup>5</sup> From Drerup, "Die Kuenstlerinschrift des Apollonions in Syrakus," *Mnemosyne* iii, 2, 1935, pp. 1-36. The drawing is Drerup's revision of the photographic facsimile in Oliverio's *L'iscrizione dell' Apollonion di Siracusa*, Bergamo, 1933.



○  
//  
V  
V

717

三  
二  
一  
〇  
九  
八  
七  
六  
五  
四  
三  
二  
一  
〇

TOILE/OVI:

ΕΛΛΗΝΟΒΕΙΝΟΜΕΝ  
ΑΝΕΦΕΚΕΤΟΡΟΛΛΟΝ,  
ΞΥΡΑΦΟΞΙΟΣ  
ΤΟΝΤΡΙΠΟΔΑΚΑΙΤΕΝΙΚΕΝΕΡΓΑΣΑΤΟ  
ΒΙΟΝΑΙΟΔΟΡΩΣΙΝΑΙΕΣΙΟΣ

1. ΗΟΚΙΝ, ΛΥΗ. ΒΙΑΡΟΝΟΔΕΙΝΟΜΕΝΕΟΣ  
 2. ΕΛΙΝ, ΕΛΗ. ΚΑΙΤΟΙΣΥΡΑΚΟΣΙΟΙ  
 3. ΚΑ, ΕΡΛΛ. ΤΟΙΔΙΤΥΡΑΝΑΓΟΚΥΜΑΣ

[illegible]

O I T E A T E K A I D E K A  
 T O W A D V A D A N T O M  
 E W A V A O W K A I A M  
 E T R I T A A R V O N  
 A N T E I T A M M N A I  
 E T E O R E S K A I  
 A N T E A R O N T E  
 E M A I F E +  
 W A I F  
 E M A I F  
 H E R A V K  
 I D R A V A  
 M O

FIG. 1. — (*Above*): SYRACUSE, TEMPLE STEP; DELPHI, TRIPOD BASE; BRITISH MUSEUM, BRONZE HELMET FROM OLYMPIA  
(*Center*): PRAXITELES BASIS AT OLYMPIA  
(*Below*): FROM SITE OF HYBLAEAN MEGARA; DELPHI, LADYAD INSCRIPTION



Her alphabet was not borrowed from the "Achaean" colonies of Magna Graecia, whose script is so familiar to us from the archaic South Italian coins. Whence, then, could it have come?

We should allow for the probability that it was Syracuse which transmitted her own version of the alphabet to Casmenae, Acrae, and (fig. 1e) the nearby Hyblaeae Megara (which, like Syracuse itself, was founded at too early a period to have brought any alphabet with it from its mother city in Greece), and during the early fifth century imposed its script on Rhodian Gela (under Gelon),<sup>6</sup> Acragas (perhaps under Theron), and Camarina (directly or by way of Gela). If these assumptions are correct, the only wholly independent community in the West which used the same type of alphabet as Syracuse was Epizephyrian Locri in Southern Italy (fig. 2). As there is no apparent reason why Syracuse should have gone to school in Locri, or Locri in Syracuse, we must seek farther back

●ΡΑΣΙΙΔΑΣΑΝΕΘΕΚΕΤΑΙΘ●●Ι

for a common source. The

Epizephyrian Locrians derived their alphabet from their kinsmen the Ozolian Locrians—Roehl correctly classes the two together in his *Imagines*—and these, living in none too civilized a region, can hardly have derived their letters from anywhere else than that nearby center of enlightenment, Delphi. It should have been here, therefore, that the Syracusans also sought to heal their illiteracy, preferring Apollo's wisdom to their own ancient mother at the Isthmus. The Ladyad inscription (fig. 1f) must surely be native Delphic; yet its alphabet agrees with Syracusan in every essential detail.



FIG. 2.—BRONZE HELMET FROM LOCRI  
(From Toscanelli, *Le Origini Italiane*, Fig. 157)

Various reasons may be suggested to explain why Delphi should have been a center for diffusion of the alphabet. The need for recording and deciphering the Sibyl's oracles was in itself incentive enough to make men learn their letters. The mere gathering and intercourse of citizens from so many Greek towns would naturally have stimulated the communication of intelligence; but unless Apollo's oracle was specifically involved, this would not explain why Delphi was so much more active than Olympia in this matter. Again, writing may at first have tended to become a priestly prerogative in Greece as in Oriental countries; but again we must explain why Apollo's priests were so much more effective than those of other gods. Whatever the immediate explanation, it seems to have been from Delphi that such a prominent community as Sparta and such isolated districts as the hill-towns of Arcadia drew their knowledge of writing. Hence the temptation for modern scholars to classify the Praxiteles dedication (fig. 1d) as Mantinean, and the very common

<sup>6</sup> The older Rhodian alphabet of Gela will be found on the bronze plaque, *IGA*. 512a = Roehl, *Imagines*<sup>2</sup> p. 34, no. 11, dedicated at Olympia by Pantares, father of Hippokrates, tyrant of Gela 498-1. It agrees with the script previously used by Telephos of Lalyos among the mercenaries' graffiti at Abu Simbel (*IGA*. 482c).



error of including the Serpent Column <sup>7</sup> among the Spartan dedications (which the local jealousy of the other Greek dedicants would hardly have tolerated), whereas it is actually an excellent example of early fifth-century Delphic.

By tracing the source of Syracusan to Delphi we have not furthered the solution of our original perplexity on the non-Corinthian nature of Etruscan, since the obvious hypothesis that Syracuse, as the western bridgehead of Corinthian trade, might have transmitted her own Delphic version of the alphabet to her Etruscan clients is eliminated by the simple observation that the Etruscan alphabet is not Syracusan. The initial assumption that commerce spreads literacy and that the alphabet travels the trade routes requires a signal qualification:—the barrier of a change of language is stronger than the movement of commerce. No one today learns Arabic or Turkish writing by collecting Anatolian brassware or tiles, nor Chinese from his Chinese paintings. This maxim explains why the Phoenician alphabet did not come into Greek possession on numberless occasions and in innumerable places. In some bilingual environment (such as Kitium in Cyprus), where the two tongues interpenetrated and the possibility of recording the one created the desire to record the other, Greek names and words were first set down in Semitic signs. So in the West, some genuine interpenetration of Greek and Etruscan speech will have occasioned the use of Greek signs to record Etruscan names and words. Where, early in the seventh century, was there such a contact?

By the start of the seventh century the Etruscan supremacy was already established from the Arno in the north to the Tiber on the east and south. At the close of the century an aggressive advance comparable to an imperialistic expansion carried Etruscan power south into Campania. In 600 B.C. Capua was an Etruscan town. But this advance to the Bay of Naples came too late to provide the geographic intimacy between Etruscan and Greek postulated for alphabetic transmission. However, political conquest seems to have been preceded by more pacific penetration. In the course of the modern excavation of the site of Cumae, there was discovered the grave of a wealthy Etruscan, containing objects almost precisely like some of those from the Tomba del Duce at Vetulonia and hence to be dated around the middle of the seventh century.<sup>8</sup> Such a burial supplies evidence of peaceful Etruscan residence in Greek Cumae for the generation preceding 650 B.C. Since Etruscan resembles Chalcidic more closely than any other epichoric variety of Greek script, the widely held belief that Cumae was the source of Etruscan knowledge of the alphabet must be pronounced correct. By sheer elimination there seems no other candidate.

And yet this elegantly simple explanation has not commended itself universally to scholars, several of whom have found serious discrepancies between the Etruscan and the Cumaeian Chalcidic letter forms. But some of the obstacles have been over-emphasized, while others have been misinterpreted:

If the terms of comparison are confined (as they should be) to the *oldest* Etruscan documents, *zeta*, *pi*, and *tau* will be found in forms satisfactorily close to the Greek norm. The *chi* like an arrowhead

<sup>7</sup> *IGA*, 70; Roehl, *Imagines*<sup>3</sup> p. 101, no. 16. *Per contra*, the inscription on the base assigned to the Delphic Charioteer (Roehl, p. 6, no. 31), in spite of the name Polyzalos, is not Syracusan nor yet epichoric Delphic, if only because of the Ionic "Ξ." On epigraphic grounds it is most likely to be Aeginetan or Rhegine and hence must have been cut by the sculptor or his helpers.

<sup>8</sup> *Mon.Ant.* xxii, 1913, "Cuma" (by E. Gabrici), coll. 422-6; 428-430 ("Tomba Artiano n. 104").



pointed downward recurs in the  $\beta\epsilon\beta\alpha\chi\chi\epsilon\upsilon\mu\epsilon\upsilon\upsilon\upsilon\upsilon$  inscription from Cumae (Roehl<sup>9</sup> p. 80, no. 28). The five-stroke *mu* with a tail has turned up in the important early Chalcidic inscription found over thirty years ago at Eretria (CIG. xii<sup>o</sup>, 1273-4 on pp. vii-ix of the *Addenda Ultima*), where the dotted *theta* and closed *heta* keep company as in Etruscan. The "figure 8" sign for F, although of earlier occurrence than is sometimes asserted, is nonetheless a specific Etruscan innovation, as its position at the end of the alphabet proves; it as little demands a Greek prototype as the Ionian *omega* at the end of the Greek alphabet requires a Phoenician ancestor. The peculiar sibilant sign of the hourglass on its side, which occurs in Campania (as well as in "Sabellic," "North Etruscan" and Cisalpine Gallic) will probably prove to be only a variant of the *san* symbol through prolongation of the slanting bars.

There remains one serious difficulty in deriving the Etruscan alphabet from the Chalcidic, and that is the presence of *san*, which was not in use at Cumae and never occurs *along with sigma* in any Greek alphabet. The two never appear together in Greek epichoric scripts for the simple reason that they are by origin one and the same symbol.

If no one doubts that *sigma* is a descendant of Phoenician *shin*, *a fortiori* no one should challenge the same ancestry for *san*, since (1) the letter-names are so similar that, in view of the Greek inability to utter the SHibboleth sound, there is less of a gap between the names *shin* and *san* than between *shin* and *sigma*; (2) the graphic symbols are identical, granted the common phenomenon of inverting signs or miswriting them according to the directional error which still today makes children and semi-literates write their N's "backward"; the *sigma* symbol is no closer, since to produce it *shin* must be turned on its side (this too a perfectly natural fatality, as anyone with an interest in psychological experiment can prove by observing how frequently a linear pattern without further spatial context will be visually reproduced in faulty axial orientation); (3) the alphabetic position of *san* is the same as for *shin*; we possess two ABC's from *san*-using communities, one from Corinth (fig. 3) and one from Metapontum (Roberts, *Intr. Gk. Epig.* i, p. 306), and in both of these *san* appears in the normal position of Semitic *shin* (i.e. where *sigma* would appear). Hence it is completely mistaken to imagine that *san* is a descendant of Semitic *tsade*, with which it fails to agree in all three criteria of letter-name, symbol-form and alphabetic position.



FIG. 3.—CORINTHIAN ABC  
(From E. S. Roberts, *Introduction to Gk. Epigr.* i)

But (it will be argued) on the Marsiliana alphabet and other Etruscan sample alphabets,<sup>9</sup> while *sigma* appears in *shin*'s position, *san* turns up in *tsade*'s place. Peculiar as this may seem, it is the best possible indication that Etruscan is not an alphabet of remote antiquity. Since it employs the non-Phoenician symbols, it is a Greek derivative; and since it alters the alphabetic position of *san* and tolerates both *san* and *sigma* in the same series, it is an artificial construction borrowing from more than one Greek source.

To judge by its geographical incidence, *san* originated among the Dorians of Crete and was disseminated thence over the Doric<sup>10</sup> islands of Thera and Melos to Argos, Corinth, and Achaea. Corinth introduced it to the islands of the Ionian Sea from Cephallenia to Corcyra; and Achaea spread it through its western colonies in Magna Graecia from Metapontum to Paestum-Poseidonia on the Gulf of Salerno. It must already have been in use at Metapontum, Sybaris, and Croton at the time that the Etruscan knowledge of the Greek letters was being acquired.

<sup>9</sup> Buonamici, *Epigrafia Etrusca*, pls. I, II, III, VI, VII.

<sup>10</sup> Cf. Hdt. i, 139: "the letter which the Dorians call *san* and the Ionians *sigma*."



But (as we have already insisted) such knowledge could not have come from mere visual familiarity with the Greek symbols on objects of Greek manufacture. In order to learn to read and write there has to be the mnemonic acquisition of a verbal patter—the ABCDEFG which we all learn as children, the “*alphabetagammadelta*” sequence of nonsensical sounds—which alone guarantees us mastery of our letters. That undoubtedly is the explanation why the Greeks clung to the Semitic rigmarole. The mnemonic patter is an unforgettable and unalterable sound-pattern which is intended to be filled out with appropriate traditional graphic symbols. Its prime utility is the completeness with which it acquits its task: everything is included, nothing is omitted. But, for that very reason, no name drops out, even when its corresponding sign is no longer in current use. Since the Greek alphabetic patter was



FIG. 4.—ETRUSCAN WRITING-TABLET FROM MARSILIANA D'ALBEGNA

constructed out of the Semitic letter-names (completely meaningless, except as letter names, to the Greek ear), there is a good chance that the entire Semitic sequence became Greek property, even though a writer of Greek did not employ all the symbols in the list.<sup>11</sup> This would be the explanation for the completeness of the Marsiliana alphabet (fig. 4). In spite of the absence of many of the sounds in Etruscan speech (which failed to make any distinction of B and P, G and K, D and T, O and U), the entire Greco-Phoenician alphabet from A to Y is recorded; and even those places for which a Greek preceptor could have had no signs in current use are filled with symbols.

Since X, with value as in Latin and English, is included, *samech* in its accepted Greek value as *xi* would be a duplicate for sound. It is not surprising, therefore, that the *samech* sign never occurs in Chalcidic Cumean inscriptions. But the mnemonic still mentioned *samech* between N and O; so a symbol was invented and inscribed at this post—the square window with four panes which is without

<sup>11</sup> This would explain the Milesian number-alphabet (Larfeld, *Griechische Epigraphik*, 3<sup>d</sup> ed., 1914, in I. Mueller's *Handbuch*, pp. 293 ff.) and its peculiarity of preserving in their proper places such letters as F and Q, long out of use in Ionia. But *sampi* tacked on at the end, when we should have expected something in *tsade's* post between P and Q, is a disconcertingly false note.



known relative or ancestor in Greek or in Semitic. And the mnemonic still named *tsade* between P and Q; so, since a sibilant was called for acrostically, the *san* alternate of *sigma*, familiar from its occurrence in Magna Graecia, was arbitrarily inserted as *tsade*. (Note in fig. 3 that the author of the Corinthian ABC had so poor knowledge of the *tsade* symbol that he could insert Ionian *samech* in its place).<sup>11a</sup> Since Etruscan speech utilized more sibilants than Greek, both *san* and *sigma* were found serviceable for writing down Etruscan words. But their phonetic values seem to have been rather arbitrarily assigned, if we may so interpret the interchange in their use which causes the "genitive" to be written with *san* and such words as *suthi* and *sethre* to be spelled with *sigma* in northern Etruria in exact opposition to the orthographic practice in the south.

Once the artificial nature of its *samech* symbol and the arbitrary treatment of *san* have been recognized, the Marsiliana alphabet can be classed without further objection as a Chalcidic Greek derivative. Normal Etruscan in its earliest archaic form is so closely apparented to the Marsiliana alphabet that it too must have had essentially the same origin. Both were (we believe) primarily learned at or near Cumae through direct personal contact between visiting or resident Etruscans and educated Cumaeans Greeks.<sup>11b</sup> The time (we maintain) was the first quarter of the seventh century B.C. and nearer that quarter's end than its beginning.

Calabria and Apulia learned to write from their direct contact with the Greek communities, just as the Sicels learned Syracusan; but it was Etruria, and not the Greek coastal towns of southern Italy, which spread the knowledge and stimulated the use of the alphabet through central and northern Italy. Oscan and Umbrian are manifestly Etruscan derivatives. As their geographical location would lead us to anticipate, Umbrian is adapted from normal Etruscan usage, while Oscan depends on the Campanian sub-species. Transmission ought to have taken place as early as the opening sixth century; yet to judge from the Oscan letter-forms, which are late, this was not the case in the South. Perhaps we have merely failed to recover the evidence for an earlier state.

Latium, with its direct exposure to Etruscan cultural influence, was one of Etruria's oldest pupils, as the Praenestine fibula (not much before 600 B.C.?) attests. The presence of the letters D and O (for which the Etruscans had no use, but which they learned in their sample school-alphabets) on both the Praenestine fibula and the Roman forum cippus, indicates that transmission was effected while the full alphabet was still being recited and written down. The Latin use of the alphabet thus considerably antedates the Cumaeans alliance and the expulsion of the Tarquins and coincides with the preceding Etruscan cultural supremacy in Latium, the existence of which it would be futile to deny. Yet if the Etruscans themselves were learning to write during the generation around 675 B.C., Latin acceptance of their accomplishment is scarcely to be anticipated until after 650 B.C. The Praenestine fibula would therefore be among the earliest instances (as it is for us actually the first instance) of the notation of Latin speech.

<sup>11a</sup> So in the Messapian ABC from Vaste not far from Lecce (Roberts, *Introd. Gk. Epig.* i, p. 272; Whatmough, *Prae-It. Dial.* ii, p. 408), X fills *tsade's* place while some sort of *san* sign is grouped with *sigma* in *shin's* position between R and T.

<sup>11b</sup> Alternatively, we should have to postulate a Cumaeans trading-post established in some Etruscan port. For ceramic evidence of intimate early Cumaeans-Etruscan relations cf. also Gabrici in *MonAnt.* xxii. 1913, coll. 382-401.



That the Latin letters came from immediate Etruscan rather than from more distant Greek instruction is strongly suggested (perhaps it may even be said, logically demonstrated) by the following considerations:<sup>12</sup>

(1) the absence of a specific symbol for X in early Latin, a lack also characteristic of Etruscan, but not of Chalcidic Greek.

(2) the Roman need to differentiate G by adding a diacritic stroke to C, indicating that the symbol C reached Latium with its Etruscan value of *k* and not with its Greek value as *gamma*.

(3) the failure<sup>13</sup> of *koppa* to be used with O as well as with U. Since Etruscan never recorded O, it could not perpetuate the Greek usage of *koppa* with that vowel; hence the Latin exclusive usage of Q with U derives from Etruscan tutelage.

(4) the abandoning of the Semitic names for the letters, on which the Greeks so sedulously insisted. That this departure was due to Etruscan mediation may be claimed on the theory that there were sonant liquids and nasals ("vocalic" *l*, *r*, etc.), in Etruscan speech and that these are reflected in the distinction which we still make today when we vocalize the letter-names for L, M, N, R, and S as closed syllables ("ell," "em," etc.), although otherwise we regularly use open syllables for the consonants ("bee," "dee," "kay," etc.). There is no apparent reason why the Romans should have invented such a distinction.

To the east of Latium, beyond the mountains, the inhospitable Adriatic shoreland did not encourage Greek settlement or trade, so that here again it was the contact of

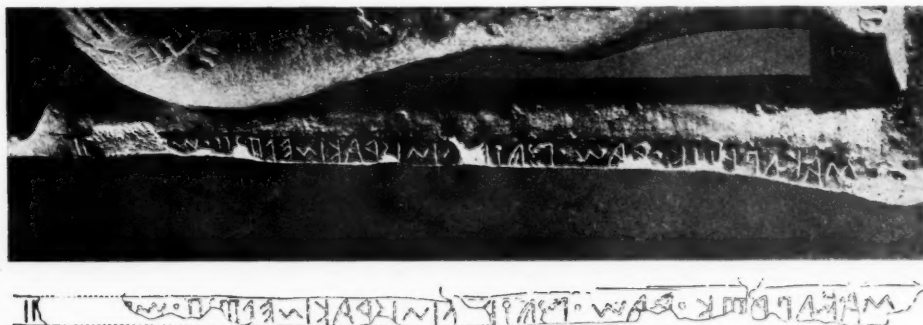


FIG. 5. — INSCRIPTION ON THE CAPESTRANO WARRIOR  
(From Moretti, *Il Guerriero Italico di Castrano*)

the overland communications which brought the alphabet. If our previous chronological determinations have been correct, the oldest writings from remote Picenum and the adjoining hill country inhabited by the Marrucini, Vestini, and Paeligni cannot be older than the sixth century and may well be later. Our pitifully small corpus of East Italic (or, as they used to be called, "Old Sabellic") inscriptions has recently had a welcome addition in the weird Warrior from Castrano with his cleanly cut but dishearteningly unintelligible legend (fig. 5). In general character the letters resemble those on the Castignano Stone<sup>14</sup> from farther up the coast near Ascoli Piceno; and all of the symbols can be matched either on this same Castignano

<sup>12</sup> On all of these the serious investigator will do well to consult M. Hammarström, "Beiträge zur Geschichte des Etruskischen, Lateinischen und Griechischen Alphabets" in the *Acta Societatis Scientiarum Fennicae* xlix, no. 2, Helsingfors, 1920.

<sup>13</sup> Except in the Duenos inscription; but even here *QOI* is for *QUOI*.

<sup>14</sup> Whatmough, *Prae-Italic Dialects* ii, p. 235.



Stone or on that from the site of Superaequom<sup>15</sup> hardly more than ten miles due south of Caestrano.

Since these two so clearly form the Warrior's epigraphic company, his inscription must be transliterated in East Italic terms, where M's and U's are inverted, *san* occurs in addition to *sigma* (as in Etruscan), *heta* shows vertical instead of horizontal bars, T has a dot on top instead of a cross-bar, and inverted V with a diacritic stroke inside presumably supplants the O lost in Etruscan. Most interesting epigraphically, if it could be established, is the apparent occurrence of a meander symbol much like Corinthian B, penultimate to the bad abrasure near the end of the inscription. This same sign was at first read on the Castignano stone; but its existence was later denied by both Lattes and Pauli. It could not in any case be interpreted as *b*, and probably has not the slightest connection with Corinth. Its existence (real or fancied) has been an evil influence, since it alone (or at any rate, chiefly) seems to have been responsible for the unfortunate theory of a "Corcyro-Corinthian" influence in East Italic—an influence which seems to be ineradicable among modern scholars, yet of which it would be only honest to say that East Italic in reality shows no trace.

As all fixed dates are lacking in East Italic epigraphy, the Caestrano Warrior cannot be dated further than by saying that the very fact that he carries a long and well-cut inscription in East Italic letters makes it highly improbable that he is older than the fifth century B.C.

Farther north along the Adriatic coast, the much-discussed Novilara stelae<sup>16</sup> use an alphabet with fewer epichoric peculiarities, being essentially early Etruscan in character. The long narrow letters, closely spaced, producing a leggy and crowded appearance, reflect a common Etruscan *cacoethes scribendi*, inherited from the primitive Greek usage of the seventh century before the straggling Semitic *eidos* had been abandoned in favor of the classical Greek norm in which every letter's locus approximates a square. The presence of B, C, and O on the Novilara inscription will be no mystery if we remember that the Etruscans long preserved the full alphabet in their ABC's, even though they had no use for all the symbols.<sup>17</sup> There are no Corinthian connections. Messerschmidt's suggestion of "*Zusammenhang, wenn nicht sogar . . . Abhängigkeit von Bologna*"<sup>18</sup> in the drawings and ornaments of these stelae underscores the obvious epigraphic dependence on trans-Appennine Etruria. But the Etruscan establishment at Felsina-Bologna and cultural penetration of the Po-land are events of the sixth and fifth centuries, so that it is highly unlikely that the Novilara stelae can be earlier than the Persian Wars—a conclusion which recent experts have reached from other than epigraphical considerations.<sup>19</sup>

So also at Este, the chief town of the Veneti, where the vast amount of grave material permits a reliable verdict, the grave markers begin to carry inscriptions in the local script during the transition from Periods II to III of the standard classification. Although this supplies only relative, and not absolute, chronology and the

<sup>15</sup> *Ibid.* pp. 289 ff.; Zvetaieff, *Insc. Ital. Med. Dial.* no. 10 (pl. IIa, fig. 2, 2a) and *Inf. Dial.* no. 12.

<sup>16</sup> *Mon. Ant.* v, 1895, pp. 173ff., figs. 29–30; Buonamici, *Ep. Etr.*, pl. LVIII.

<sup>17</sup> Thus the ink-flagon from Caere (Buonamici, *Ep. Etr.*, pl. II) carries a complete alphabet of 25 letters around its base, but in its demonstration of written syllables combines only 13 consonants with 4 vowels.

<sup>18</sup> Von Duhn—Messerschmidt, *Italische Gräberkunde* ii, p. 178.

<sup>19</sup> On the Novilara stelae cf. Messerschmidt, *op. cit.* pp. 174–180, for a full discussion of the alphabet, Whatmough, *Præ-Italic Dialects* ii, pp. 520–2, 211–7. This latter work is also of cardinal importance for the East Italic inscriptions, pp. 222–256, 522–530.



absolute dates are still much disputed, recent discussions<sup>20</sup> seem to leave little doubt that we are dealing, as at Novilara, with the early fifth century B.C., shortly after the Etruscan expansion north of the Apennines (itself a phenomenon probably consequent on the definitive repulse of Etruscan ambitions in Campania and Latium).

As an important cultural and commercial center in an environment that must have been polyglot, Felsina-Bologna was admirably suited for disseminating the Etruscan system of writing not merely through the Venetic communities of the Adige and Po basin, but among the Ligurian and Rhaetic tribes in the river-valleys of the Italian Alps. That the alphabet travelled along the trade-routes, even though it was not purely the movement of commercial goods which carried it, is shown by the inscriptions engraved on the Alpine imitations of the bronze Etruscan "Schnabelkannen" from the cemeteries in the Ticino valley at Bellinzona. It was here that Etruscan exports passed to northwestern Europe, being conveyed not (with the modern railway) all the way up the Ticino to the St. Gotthard, but through the lateral confluent of the Val di Mesocco over the San Bernardino Pass to strike the headwaters of the Hinter-Rhein.<sup>21</sup> The two inscriptions thus far discovered on Rhaetic "Schnabelkannen" (fig. 6)<sup>22</sup> are in some local tongue incomprehensible to us and are written in letters which suggest a fusion between pure Etruscan and its east-coast derivatives. They show the letters A, U, T, and (less perfectly) Z, already in the altered shapes which they were to assume in the Teutonic Runes—though it may be questioned whether the Hinterrheintal is not a blind alley in the search for Runic origins.

After the Etruscan collapse and the emergence of a cis-Alpine Gaul, the Celtic flood probably did little to help or hinder North Italic writing. When at last the Roman power spread north of the Apennines, the Latin letters were not immediately (nor even, soon) substituted for these older deeply-ingrained North Italic ones in writing un-Roman native tongues. The evidence points to the Sullan period of the late Republic for the final Romanization of the Rhaetic script. Thus in the tombs of San Bernardo near Ornavasso (where the Simplon railway leaves Lago Maggiore above Stresa) the documents are all in epichoric script and are dated by the accompanying finds of Roman coins to somewhere in the period 234–89 B.C.; whereas the *graffiti* from nearby *In Persona*, dated by the same means to the period between 89 B.C. and A.D. 81, are all in Latin letters.<sup>23</sup> From Voltino (near the western shore of Lago di Garda among the mountains at its northern end) there comes a bilingual employing the native ("Sondrio") script for the native portion and for the Latin version "the ordinary Latin alphabet of about the Sullan period."<sup>24</sup> This is important evidence for maintaining that if the Runes (as excellent recent opinion claims) were derived from North Italic, their transmission beyond the Italian frontier must have taken place earlier than Julius Caesar—otherwise, inevitably, Central Europe

<sup>20</sup> Von Duhn—Messerschmidt, pp. 17–23; 33–52; 58–63.

<sup>21</sup> Randall-MacIver, *The Iron Age in Italy*, pp. 94f.

<sup>22</sup> From Jacobsthal-Langsdorff, *Die Bronzeschnabelkannen*, pl. 23, and Whatmough, *Harvard Studies in Classical Philology* xlvii, 1936, p. 206.

<sup>23</sup> Whatmough, *Prae-Italic Dialects* ii, pp. 109–119.

<sup>24</sup> *Ibid.*, p. 57.



would have used the Roman letters—but need not have been any earlier than the second century B.C. Such a date may seem strangely late to the Greek epigraphist, improbably early to the Runic scholar. Yet the temporal chasm between the latest specimen of North Italic and the earliest specimen of Runic is not too great to be

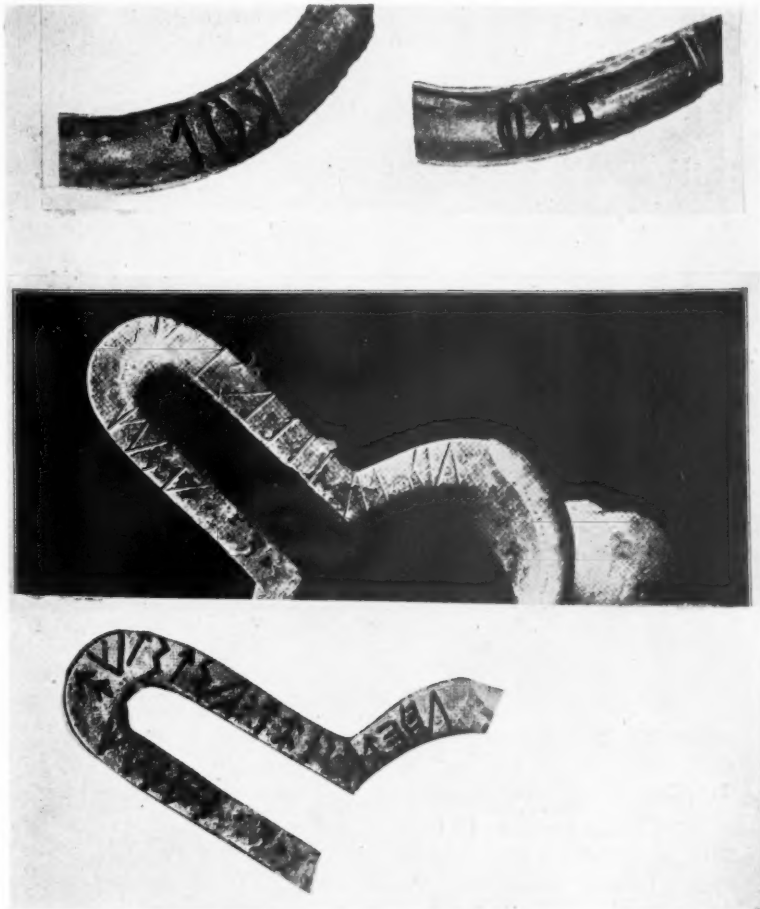


FIG. 6. — (Above): INSCRIBED HANDLES FROM RHAETIC JARS  
(From Jacobsthal-Langsdorff, *Die Bronzeschnabelkannen*, Pl. 23)

(Below): ZÜRICH, MUSEUM, INSCRIBED SPOUT  
(From *Harvard Studies in Class. Phil.* xvii, 1936)

spanned. And spanned it must somehow be; for the Runes are evidently *on style alone* an archaic Greek derivative. Any unprejudiced observer with a trained eye for epigraphic style must see something of the spirit of the first Greek scribes of the seventh century B.C., who taught the Etruscans their alphabet, still persisting in the signs with which the Swedish runemaster carved the rock at Möjebro (fig. 7) a full



thousand years later! Such an extraordinary phenomenon can be explained by the extreme conservatism with which the Greek characters were preserved and transmitted in barbarian hands. The Etruscan inscription scratched beneath the base of



FIG. 7.—SWEDEN, MÖJEBRO STONE

an Attic red-figure cylix from Tarquinia<sup>25</sup> does not resemble contemporary Greek writing, but looks as though it still belonged in the seventh century; the East Italic stones always impress the observer as highly ancient and in consequence tempt him to assign them over-

great antiquity; some of the Venetic inscriptions are even more misleading, the Rhaetic completely so; the letters scratched on the stag-horns from Magre<sup>26</sup> from Hellenistic times could almost keep company with the very earliest Greek inscriptions, such as those on the hearth-coping of the Hera sanctuary at Corinthian Perachora. Centuries after the Greeks themselves had outgrown the archaic letter-forms, Etruscan, Venetic and Rhaetic scribes still traced out their elongated and angular shapes. It was these—not the contemporary Greek letters—

which reached the Celtic and Teutonic world of Central Europe ahead of the spreading power of the Roman empire with its equally long-lived Latin letters.<sup>27</sup>

BRYN MAWR COLLEGE

RHYS CARPENTER

<sup>25</sup> Buonamici, *Epig. Etr.*, pl. XLVIII.

<sup>26</sup> Whatmough ii, pp. 41f., figs. 1 and 2.

<sup>27</sup> For the intricately fascinating subject of the derivation of the Norse runes consult the compendious survey of the theories of Marstrander and Hammarström and the supplementary discussions by Helmut Arntz in the latter's *Handbuch der Runenkunde*, Halle, 1935. There are also recent books and articles by W. Krause and Altheim-Trautmann. Marstrander's contributions are mainly to be found in *Norsk Tidsskrift for Spragvidenskap*, 1928 *et seqq.*, Hammarström's in *Studier i Nordisk Filologi* edited by Pipping, vol. 20 no. 1 ("Om runskriftens härkomst"). Helsingfors, 1929.



## FROM FARTHEST WEST

IN HONOR of Professor Beazley's jubilee, and with the thought, especially, of illustrating or seconding his connoisseurship, I publish my camera's rough notes of some vases that have migrated to California. To their owners, whose permission to study and reproduce those pieces made this offering possible, I am very warmly grateful.

Let me begin (fig. 1, 1) with something jubilant, the capers of a team of young komasts, on something rare, so rare that archaeologists still wince, unhardened, at their jargon's name for it—a kalathos.<sup>1</sup> On this specimen, in Mr. William Randolph Hearst's collection at San Simeon, the youths wear dancers' bandoliers: not, for this occasion, the ordinary fillets of white wool, merely made to jig and twinkle; here they are of the most festive sort, flowery and fragrant, the *lei*-like garlands in which Beazley has taught us to recognize the ὑποθυμίδες of Alcaeus and Sappho.<sup>2</sup>

Next, two "extra-illustrations" of Beazley's *Amasea*.<sup>3</sup> Some years before the War, Mr. Victor Merlo of Hollywood acquired a batch of choice fragments, relinquished by the Soprintendenza for Campania. Can there be any doubt that one (fig. 2, 1) is the "small very fine fragment of a neck amphora from Cumae" which Beazley saw in Naples and attributed to the Amasis Painter (*JHS*. 51, 1931, p. 261)? When Mr. Merlo let me study it, it was (with the rest of his collection) in the Museum of History, Science and Art at Los Angeles. As Beazley noted, "it seems to be part of just such a vase as the three signed neck-amphorae in Paris and Boston." Another piece of Amasean work that has left Naples for California (San Simeon) is a complete amphora, No. 15 of Beazley's attributions in *ABF*. (p. 33). My photographs are not worthy of the vase (fig. 1, 2), but they give more of its decoration than was tantalizingly published in the Bourguignon catalogue.<sup>4</sup> To set it off, I show, also from Mr. Hearst's collection, an amphora roughly contemporary (fig. 1, 3; fig. 2, 2; fig. 3, 1), surely a work of the Princeton Painter:<sup>5</sup> A, warriors departing for B, battle. Its tamer side is no bad foil for the formal perfection of the other piece. But on its own painter's account, both its pictures are well worthy of note. How strongly, especially if compared with work of the Swing Painter<sup>6</sup> on a vase in Rochdale,<sup>7</sup> they reinforce a point Beazley once made,<sup>8</sup> that the Princeton

<sup>1</sup> On kalathoi, see *CVA. U.S.A.*, 5, text to pl. 52, 1; Richter and Milne, *Shapes and Names*, pp. 13 f. Cf. *Bull. City Art Mus. St. Louis* 9, p. 28. The example at San Simeon (SSW 9828) came from Orvieto by way of the Bourguignon collection at Naples (*Collection d'antiquités . . . provenant de Naples, vente du 18 au 20 mars 1901* [hereinafter "Bourguignon Catalogue"], no. 46, pl. 3). Clay mostly very glossy, not very warm in tint. Under base, two concentric circles, 4.6, 2.2 cm., around black dot; resting surface black. Inside of receptacle black with four rings of painted red (one on bottom of inside). In the komos, eight figures; red for hair of each (except the wearer of a red fillet); white hypothyrides. H., 8.8; d., 9.1; d. foot, 6.2 cm.

<sup>2</sup> *JHS*. 51, 1931, p. 262.

<sup>3</sup> *JHS*. 51, 1931, pp. 253 ff.

<sup>4</sup> No. 16, pl. 2, from Orvieto.

<sup>5</sup> On this vase-painter see Beazley, *BSA*. 32, pp. 17–18, *JHS*. 59, 1939, p. 305.

<sup>6</sup> Beazley, *BSA*. 32, pp. 12–16; Webster and Charlton, *Manchester Memoirs* 83, pp. 191–201 (Charlton); Beazley, *JHS*. 59, 1939, p. 305. Work of this painter on Bakalakis' fragments from Kalamitsa (*BCH*. 60, 1936, p. 480, fig. 22)?

<sup>7</sup> Charlton, *op. cit.*, pl. 2, a–b.

<sup>8</sup> *BSA*. 32, p. 17. "Parent" is exactly true to Beazley's meaning, if I have not misread between the lines of *JHS*. 59, p. 305. From my notes of the Princeton Painter's amphora at San Simeon (SSW 9832),





1c



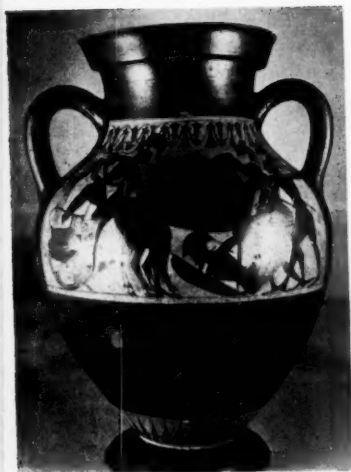
1b



1a



2a



3b



3a



2c



2b

FIG. 1.—VASES IN MR. HEARST'S COLLECTION





1



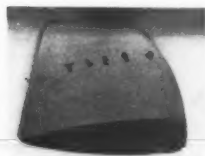
5a



7



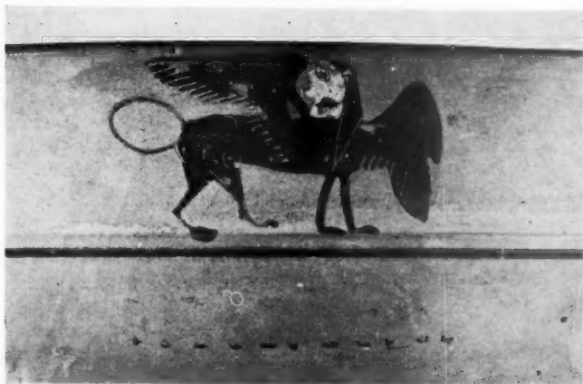
6



3



4



5b



2b



2a



8

FIG. 2.—VASES IN THE COLLECTIONS OF MR. HEARST (2, 4, 5, 8) AND MR. VICTOR MERLO (1, 3, 6, 7)





3b



2a



3c



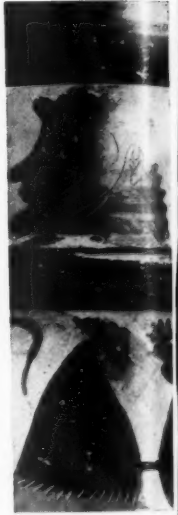
2b



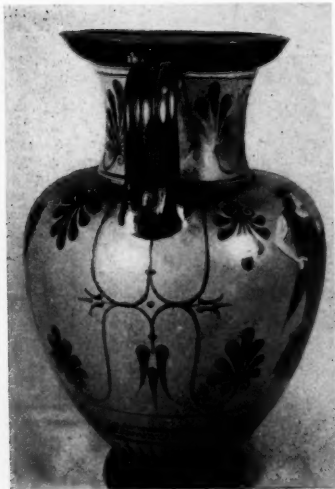
3a



2c



3a



4b



1



4a

FIG. 3.—VASES IN MR. HEARST'S COLLECTION



Painter's style was parent to the Swinger's. No one who knows the Swinger's types will wonder how I came to pick my detail (fig. 2, 2a) from side A. What I take from B (fig. 2, 2b; fig. 3, 1) is to bring out an affectation which the Swinger apes; this furious and deadly battle is fought without weapons; right hands and even scabbards are empty.

*Amasea* led to *Little-Master Cups*; so I turn to Tleson, "the typical, the classical little-master." I do not find, either in Hoppin's *Handbook* or in Beazley's article (*JHS.* 52, 1932, pp. 172 ff.) mention of Mr. Merlo's fragment of a Tleson signature from Cumae: no novelty, noted and published long ago in its Neapolitan days (*MonAnt.* 22, p. 485, fig. 186a), but so murkily that it is not surprising that scholars should have overlooked or fought shy of it. In verification, I republish it (fig. 2, 3). Mr. Hearst has at San Simeon two signed cups of Tleson which have been recorded (Hoppin, p. 396, no. 31, p. 405, no. 45; Beazley, *op. cit.*, p. 172), but not published. I can now give a glimpse of the one which has figured decoration (fig. 2, 4).<sup>10</sup>

We are not much amused by (nor have I found many archaeologists much aware of) a pleasantry<sup>11</sup> dear to almost all schools of the "animal style," dangerous situations that are everlastingly safe. But let it be my precedent for putting Tleson's partlet in threatening company: a pair of uncommonly restless sphinxes from another little master's unsigned but inscribed cup in the same collection (fig. 2, 5). A sphinx on all fours is a sphinx up to mischief, and I should not like to think it quite an accident that under each Φῖξ ὀλοή<sup>12</sup> a bit (ολυο)<sup>13</sup> of the decorative inscription very nearly says, "I am destructive." Two of Mr. Merlo's sphinxes, more conventional in their poses, well deserve a clearer view than can be had of them in *MonAnt.* 22 (figs. 178, 185). The first (fig. 2, 6) is from an Attic lekanis (the work, is not, as Gabrici thought, Corinthian). The second, likewise Attic, is interesting for a technique (white on black with incised detail) that is surely very rare in the Attic animal style (fig. 2, 7). Here, too, if I may herd Italic with Attic beasts, is the place for something I should not care to omit, the animal frieze of an astonishing vase which has passed from Lord Revelstoke's<sup>14</sup> to Mr. Hearst's collection (fig. 2, 8; fig. 3, 2). "Italo-Corinthian"? In shape and accessory ornament this piece can be matched with oinochoai that might be so called (Albizzati, pl. 16, 158; Brants, pl. 14, 77); but one hesitates to pin a label certainly invidious to figured work so far

some points that might help a study of the connection: ratio of h. (38.8 cm.) to d. (26.0 cm.), 1.492; distribution of red lines, two very close together on foot, two above rays, two under panel, one above floral frieze, one at level of uppermost parts of upper handle-roots, one between that line and the rim; no red lines elsewhere, except that the vertical framing lines of panels are red.

<sup>10</sup> *JHS.* 52, 1932, pp. 167 ff.

<sup>11</sup> I do not recall seeing at San Simeon the fragment mentioned in *JHS.* 52, p. 193. Unless my memory is at fault, Hoppin's no. 31 (with no pictures) is there, but I made no note about it.

<sup>12</sup> See *CVA.* U.S.A. 10, text to pl. 18, 1.

<sup>13</sup> Hesiod, *Th.* 326. For a fuller view of one side of this cup, on a smaller scale, see *Coll. Dr. B et M. C.* pl. 17, 144.

<sup>14</sup> The inscriptions: in fig. 2, 5a, χοαοουολυο; in fig. 2, 5b, χολοουολυολ. I have not much doubt of the lambdas, though some of them are very faint in the downstroke. I may be wrong in my transcription of the third letter of the first inscription.

<sup>15</sup> Puttick and Simpson, *Catalogue of the Collection of Ancient Greek Pottery . . . of Lord Revelstoke*, April 5, 1935, No. 90.



from barbarous in taste, and executed in tolerable glaze and paint. The types are Corinthianizing<sup>15</sup> in the main, but perhaps the technique (especially the detail in streaky white) shows the influence of East Greek ware (cf. *JHS*. 1887, pl. 79, top). Provenience unknown.

Attic undoubtedly, the neck-amphora of my fig. 3, 3 (Hearst collection) settles what was once in doubt, that a remarkable hydria in Professor David Moore Robinson's collection is Attic.<sup>16</sup> Surely that hydria (*CVA*. Robinson 1, pls. 17 and 18, 1), this amphora, and a dinos in Boston (34.212) with Calydonian boar-hunt above animal frieze, are all by one hand? D. von Bothmer, who has undertaken to publish the Boston dinos, agrees.

Nothing is much worse than a late bad neck-amphora of Attic black-figure, bad because too late, bored work done to stale prescription. The Edinburgh Painter (belonging to the Leagros period) is rather late, but he is savingly experimental; sometimes he departs from the old shape of neck-amphora, sometimes, by merely shrinking it, he makes of it something he can treat with novelty and zest; then results work that in decorative charm surpasses what the Edinburgh Painter achieves on his favorite vehicle, the lekythos. Witness a miniature piece acquired by Mr. Hearst from the Revelstoke collection (fig. 3, 4; fig. 4, 1); the attribution is Beazley's.<sup>17</sup> Its Triptolemos has not yet taken off. On another San Simeon vase, a red-figured hydria which Beazley has assigned to his Troilos Painter (*ARV*. p. 191, 13), an artist acquainted with "Nolan" (or suspended) decoration, we find the young philanthropist aloft (fig. 4, 2), doing duty for the triter flying Victory.

To turn back in time, to work of about 540 B.C. (fig. 4, 3): Theseus and the Minotaur, Herakles and the Nemean lion, are the subjects of a lekythos at San Simeon which Miss Haspels has already put in its right neighborhood among lekythoi (*ABFL*. 34, no. 4), though she has not given any to the same hand. Unless I am mistaken, its artist is the converse of the Edinburgh Painter, in that he is by preference a decorator of small neck-amphorae, who only now and then takes up lekythos-painting. At any rate, I am sure that British Museum B 175 (fig. 4, 4)<sup>18</sup> and B 292<sup>19</sup> are to be assigned to him: also Villa Giulia 24999,<sup>20</sup> Close in style to those neck-amphorae stand others; Villa Giulia M507,<sup>21</sup> Brussels R309,<sup>22</sup> Mannheim Cg 41 (Jacobsthal and Langsdorff, pl. 39, a). The only other lekythos which I can claim for this painter is Naples H2727.<sup>23</sup> This is, to tell the truth, a feeble little group, with quaintness and marked peculiarity for its only charms. The Hearst lekythos seems to be its piece *de luxe*; our artist has there done his scratchy best to be rich, even applying his graver to the texture of women's hair.

<sup>15</sup> Goat, swan, ram, siren: even the excessive spotting of the siren's wings can almost be matched in Corinthian ware (*CVA*. U.S.A. 2, pl. 6, 1). I must reserve fuller description of the technique for an exhaustive publication doing justice to the uniqueness of this piece.

<sup>16</sup> Confirming Beazley's opinion (*JHS*. 54, 1934, p. 89).

<sup>17</sup> In Haspels, *ABFL*. p. 220, no. 81. On B: abduction? recovery? See Beazley, *JHS*. 47, 1927, p. 78; Dugas, *BCH*. 60, 1936, pp. 159-169.

<sup>18</sup> *CVA*. Gr. Br. 4, III H e, pl. 45, 8.

<sup>19</sup> *Ibid.*, 71, 2.

<sup>20</sup> *CVA*. It. 1, III H e, pl. 3, 4-5.

<sup>21</sup> Mingazzini, *Coll. Castellani* 269, no. 507, pl. 79, 3, 7.

<sup>22</sup> *CVA*. Belg. 2, III H e, pl. 20, 7.

<sup>23</sup> Angelini and Patroni, *Vasi dipinti del Museo Vivenzio*, pl. 1; Haspels, *ABFL*. 34, no. 5 (discerningly, she puts it *next* to the Hearst lekythos in a miscellaneous list of early shoulder lekythoi).





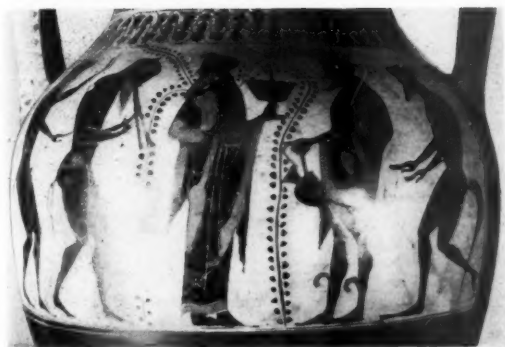
2



3a



1



6b



5b



5a



3b



4



3c



6a



3d



3e

FIG. 4.—VASES IN MR. HEARST'S COLLECTION (1, 2, 3, 5, 6); VASE IN THE BRITISH MUSEUM (4)





1b

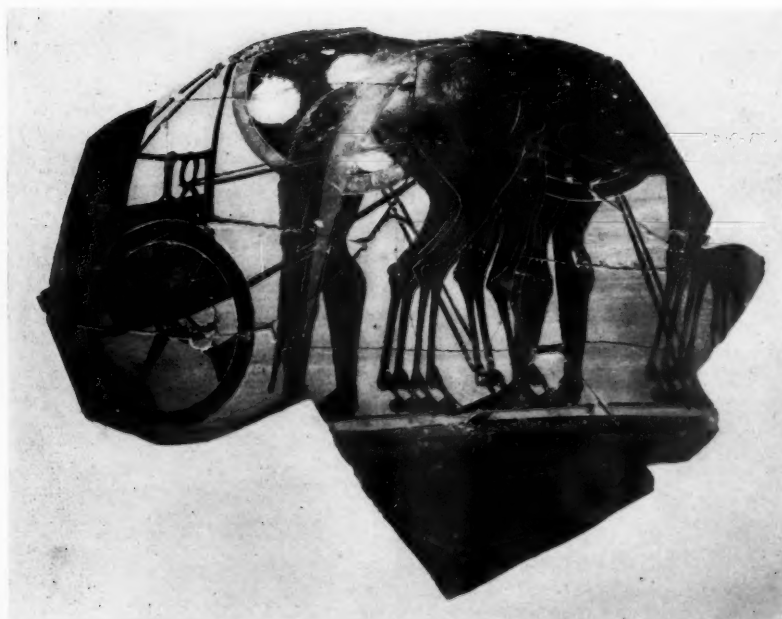


1a



2

(Photograph by V. Duran)



3

(Photograph by V. Duran)

FIG. 5.—VASES IN MR. HEARST'S COLLECTION (1); VASES AT THE UNIVERSITY OF CALIFORNIA (2, 3)



A much handsomer group of small neck-amphorae can be assembled round another vase of the Hearst collection, which I figure in fig. 4, 5; fig. 5, 1 (A, Herakles and Triton; B, man kissing woman, in public). By the same hand as this very pretty piece are the following: *Collection Pozzi* 456 (pl. at p. 36); British Museum B 221;<sup>24</sup> British Museum B 262.<sup>25</sup> If I may give the painter a name, I should like to dub him the Medea Painter—after the principal figure of the rejuvenation scene on British Museum B 221.

A handy name (Outing Painter?) is very badly needed for that notable Exekiad and Andocidean whose masterpiece is a Dionysiac excursion (with juveniles) on an amphora in Würzburg (Langlotz 267, pls. 76 f.).<sup>26</sup> From the Bourguignon catalogue's half-publication of its no. 18 (pl. 1), an amphora now at San Simeon (my fig. 4, 6), one could hardly guess that this was a work of his; but having seen the satyric reverse of its Amazonomachy I cannot doubt that it is by the same hand as the Würzburg amphora. As Mrs. F. M. Hamaker's sharper eyes discerned when I was still uncertain, a fragment at the University of California in Berkeley (8.4181a, fig. 5, 3) is to be attributed to another Andocidean, the painter of Louvre F 295 (CVA. France 9, III H e, pl. 70, 7; Beazley, *ARV.* p. 6, 12).

It is not amiss, for a festive occasion, to include two kottabists, one Greek, from a cup at San Simeon (fig. 6, 1),<sup>27</sup> one Italic, from a vase at Berkeley which is an oddity of the first rank, something that in Italic work I cannot match, a "bilingual" eye-cup (fig. 6, 2; cf. fig. 5, 2).<sup>28</sup> Between each pair of eyes is a single silhouette, A, youth looking back at B, woman. In the r.f., no relief-line; in the b.f., no incision.

Something is due from Myson, in honor of the scholar who, at some cost in controversy, established Myson in his proper importance. Fig. 7, 1 shows his San Simeon krater (attributed by Beazley, *ARV.* p. 169, no. 4). As Beazley long ago suspected (though he has never published his opinion), it is likely that a skyphos which is also in Mr. Hearst's possession (A, starter signalling to B, racer in armor)<sup>29</sup> is a slight work of Myson's great pupil, the Pan Painter (fig. 7, 2).

For later specimens of Attic red-figure: an oinochoe (fig. 7, 3; fig. 8, 1) by the Altamura Painter (*ARV.* p. 415, no. 54), another (fig. 8, 2) by Polion (*ARV.* p. 798, no. 12); both Spina's loss, San Simeon's gain. The white lekythos, by the Sabouroff Painter (fig. 8, 3), must be no. 157 of Beazley's attributions to him (*ARV.* p. 563), if I am not mistaken in identifying this vase of the Hearst collection with no. 45 of the Revelstoke sale.

For comparison with an Attic vase in Oxford (554) which Beazley has published (CVA. Great Britain, 3, pl. 4, 7-8), I figure an Apulian counterpart, Mr. Merlo's "Andromeda" (fig. 8, 4). Mr. Hearst's plastic kantharos (fig. 7, 4; fig. 8, 5) is an

<sup>24</sup> CVA. Gr. Br. 5, III H e, pl. 54, 1; Gerhard, *AV.* pl. 157.

<sup>25</sup> *Ibid.*, 68, 2.

<sup>26</sup> Beazley, *ARV.* p. 5, no. 5; he attributed to the same hand a Panathenaic in Nauplia (*AJA.* 1943, p. 443). Justified, his reserve about the Würzburg mastos (Langlotz, pl. 109, 391), there only associated with those amphoras; may it not be assigned to the painter of London B 208 (*ARV.* p. 5, no. 10) and Cambridge 48 (*ARV.* p. 5, no. 8)?

<sup>27</sup> Beazley, *ARV.* p. 130, no. 1 ("might be by the Kleophrades Painter in his earliest period").

<sup>28</sup> Apparently not Etruscan: said to be from Barletta.

<sup>29</sup> Drawings of A and B, Hauser, *JdI.* 10, 1895, p. 191, fig. 16. B only, *Bourguignon Catalogue* no. 49, p. 16 and pl. 2. "Slender evidence for the theory that Greek runners started off the hands" (Gardiner, *Athletics of the Ancient World*, p. 142).





1

(From Trimmed Photograph: The Vase's Ground *not* White)



2

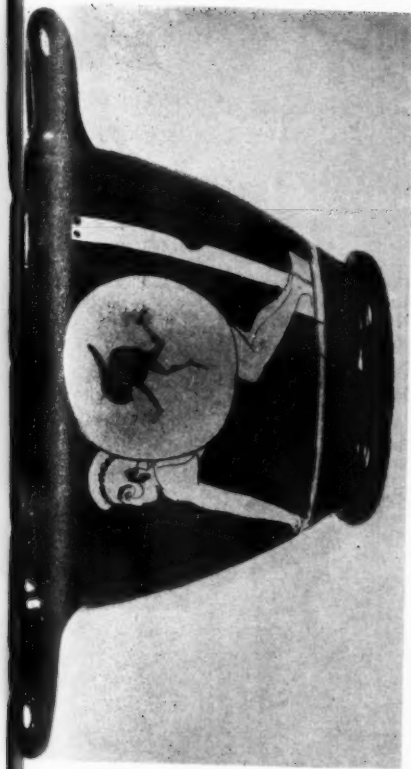
(Photograph by V. Duran)

FIG. 6.—VASE IN MR. HEARST'S COLLECTION (1); VASE  
AT THE UNIVERSITY OF CALIFORNIA (2)





2a



2b



1b



3



1a



4b



4c



4a

FIG. 7.—VASES IN MR. HEARST'S COLLECTION





3a



1



3b



5



2b



4



2a

FIG. 8.—VASES IN THE COLLECTIONS OF MR. HEARST (1, 2, 3, 5) AND MR. MERLO (4)



earlier product of the same region of Southern Italy. Its pictures (woman stooping to catch up her pet bird, satyr piping—and winking) belong to that intermediate stage of Apulian decoration (not yet recklessly florid, nor devilishly facile) of which the Tarporley Painter's work is typical.<sup>30</sup> I do not recognize his (or any particular) hand; of comparable style, the miniatures of vases published in *Bull. Arch. Nap.* 4 (ser. 2), pl. 11, 1–3, *RM.* 2, p. 47. The plastic parts—nymph like a tragedy queen, backed with a satyr whose sleekness is not quite enough to make his ugliness comical—can serve to bring out the full flavor of early Attic jests in this kind; cf. especially Beazley, *JHS.* 49, 1929, pl. 6, 1–2 and 3–4 (the second of these is now under the same roof as its Apulian foil). However, the special interest of this piece is in the relation of its plastic types to painting—not of its own time. The satyr is no brother of the figure above him. But, rumped a little, he would be very like the Marsyas of an early South Italian master, the Amykos Painter,<sup>31</sup> while the nymph is cousin to the Sisyphos Painter's melancholy harpist.<sup>32</sup>

My last item, being a freak of Attic black-figure, comes out of order. But it deserved a special place: it was perhaps the most mysterious (the most wondered about if not the most yearned for) of all “lost” vases; moreover, by a reckoning near enough, it is a jubilarian in its own right, coeval (as a thing bescholed) with the scholar in whose honor I can, by the kindness of Mr. Hearst, now retrieve it. Pamphaios' white ground-cup (fig. 9) may be counted an apparition of 1885, the “real” date of *AZ.* 41, in which (p. 239 f., pl. 16, 1) Meier published a description of the piece, and drawings of uneven merit: a view of the interior, good enough to elicit from Pfuhl (*MuZ.* 1, p. 285) an attribution probably correct (to the painter of British Museum B 300);<sup>33</sup> spectral and misleading sketches of the exterior (one side of it). In closing this paper with it, I feel no keen sense of climax. But my photographs can minister to curiosity, and I am glad of the opportunity to correct some received errors: Meier's description was not quite accurate, and has been garbled since.

It is at San Simeon (SSW 9890). The whitened stem, which at present gives this cup a height of 11.0 cm., is modern; but (*pace* Meier and his echoes) the foot (or most of it) is antique. Though this is unlike anything I have ever seen under a black-figured cup,<sup>34</sup> I am not at all sure that it is alien; it is at least accountable, as freakish support of freakish bowl (this zoned like the bowl of a band-cup, but not built like one). It is quite possible (see text to *CV.A.* San Francisco, pl. 4, 2) that Pamphaios made this cup without any stem at all.

*Pace* Philippart (*Les coupes attiques à fond blanc*, pp. 8 f.), not only the inside of the bowl but also its outside (save the handles) has a slip. In the white of this there is an olive tinge. No part of the foot is slipped.

<sup>30</sup> Trendall, *Frühitaliotische Vasen*, pp. 25–27, 40–41. Marks here of this still conservative phase: the woman capless; a segmented ball used as filling ornament (to right of the woman); vase-painting on vase-painting; bird-fancying; form of the plant (with “plume” above the upper volute, and with the besetting leaves quite simple, not palmate).

<sup>31</sup> Trendall, pl. 9.

<sup>32</sup> *Ibid.*, 20.

<sup>33</sup> Hoppin, *Handbook* 301 (after *WV.* D, pl. 6, 1), *CV.A.* Gr. Br. 8, III H e, pl. 74, 1, pl. 75, 1.

<sup>34</sup> The feet of Droop cups (Ure, *JHS.* 52, 1932, pp. 55 ff.) have black edges and a black band in the hollow; but I remember none with gradation in the profile, nor any unquestionable example that has so wide a hollow.



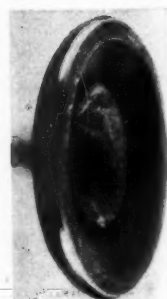
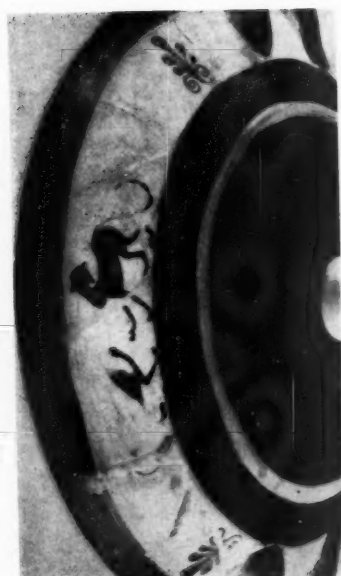


FIG. 9. — VASE IN MR. HEARST'S COLLECTION



The diameter of the bowl is 20.6 cm. (27.0 with the handles). Inside: mounted hunter (if not warrior), wearing chlamys and petasos of an uncommonly flat type that is perhaps phase-marking (cf. the kyathos in Cambridge, *CVA*. Gr. Br. 6, pl. 21, 1, love name Philon), carrying two spears (their shafts partly in relief line): accompanied by his dog (forefeet preserved and a very little of belly and loin). Red for part of the man's hair, for his beard, and between some folds of his chlamys, for the mane of his horse and most of its tail. As to what is ghostly: "Die heller gezeichneten Theile sind von einem Vasenrestaurator in S. Maria di Capua" (the vase was not found there, but at Orvieto) "mit Bleistift auf der Schale ergänzt." Whether any traces of ancient work underlie the Capuan's supplement, Meier does not say; I did not note any. In the signature Πανφαῖος ἐποίησεν, the second word's second letter (over a crack) has been refreshed: it is now more like a phi than like a pi.

Outside, A and B. Between palmettes (no red or incision), a pair of panthers: on A, red necks, red between two incisions on haunch (sic), red blob on flank (sic); on B, only the necks are red. Tails in relief line.

That the same painter decorated the black-figured eye-cups<sup>35</sup> of the potter Pamphaios is not (to me) evident, though it is not unlikely. My photographs leave not very much doubt that this white cup and the two signed hydrias<sup>36</sup> of Pamphaios were painted by one hand; would it be very rash to recognize the style of those hydrias (shorn of some affectations apt only there) on an amphora in the British Museum, B 201 (*CVA*. Gr. Br. 4, III H e, pls. 40, 1, 41, 3)? The exterior of the San Simeon cup exhibits, like the predella of the London hydria, the Pamphaios Painter's unfitness to wear the mantle of Tleson. We are not forbidden to guess that the interior picture was once an example of his virtues, liveliness (at need) and decorative tact. I would defend, even against Beazley,<sup>37</sup> the mannerism of his work in the main painting of the hydrias. On hydrias so built, what else would do?

UNIVERSITY OF CALIFORNIA

H. R. W. SMITH

<sup>35</sup> Hoppin, 303, 306-309, Albizzati, no. 453 (pl. 68).

<sup>36</sup> See n. 33. For the Paris hydria, Bibl. Nat. 254; Hoppin, 305, *CVA*. France 10, pl. 58, 3-4, 8, pl. 59.

<sup>37</sup> *JHS*. 52, 1932, p. 140.



## A NEW ATTIC ONOS OR EPINETRON

NO ARTICLE or monograph has been written in English on that rare type of ceramic art, called onos, of which more than forty examples exist (see appendix, pp. 488-90). The only one in America, so far known, is in the Metropolitan Museum. Another (figs. 1, 2) was purchased in England and has come into my collection. It is said to have been found near Athens in 1939. It is of red-buff Attic clay, only 25.5 cm. (10 inches) in length.<sup>1</sup> It has been mended, but is unrestored, save for a patch on the right side of the goddess' nose. It is of semi-elliptical or semi-cylindrical shape, hollow and open on the bottom and at the lower end. It widens slightly toward the lower end, tapering upward and outward. It was evidently meant to fit over the knee and the part of the leg above the knee, which increases slightly in thickness. Experiments prove that it performs this function perfectly. My former teacher, Carl Robert, of Halle, long ago suggested,<sup>2</sup> taking a hint from Sophoules, that such objects were used by Athenian women in working wool. This is proved by such an implement (2179) in the National Museum at Athens,<sup>3</sup> which pictures on its side a woman seated with such an object covering her right knee and adjacent thigh. The closed end is fitted over her knee-cap. There is a basket of wool in front of her, another and a loom behind her. A woman in front holds a rod, waiting to receive the wool which she will wind about the rod or spindle. The seated lady can hardly be said to be spinning,<sup>4</sup> or to be improving the texture of the spun threads for weaving, or to be rubbing thread<sup>5</sup> over the surface of the epinetron to make it even and smooth. She is using both hands and not one, as Robert believes. Robert<sup>6</sup> says: "Sie (the epinetron in Athens) belehrt uns, dass man die Wolle auf einem Gerät, das man den 'Esel,' entsprechend unserem 'Bock' nannte, zu reiben pflegte, um sie für das Spinnen geschmeidiger zu machen." So also Hauser, as cited in note 5. The *British Museum Guide* states: "Before the wool was placed upon the distaff, it appears to have been rubbed with a view to the separation of the fibres, upon an instrument, known as the epinetron." Miss McClees<sup>7</sup> notes: "For making the roves

<sup>1</sup> The length inside is 20.5 cm. The greatest height at the upper end with the bust is 10 cm. (inside 9.5 cm.), at the bottom 8.2 cm. (inside 8 cm.). The width at the top end is 11.4 cm., at the bottom 12.2 cm. The thickness is ca. 0.05 cm. Length of bust 6.8 cm., width at bottom, 3.5 cm., at top, across *stephane*, 4.2 cm. Height of bust from surface of vertical end 2.6 cm. Height of face 2.4 cm., of *stephane* 0.8 cm. Width of face 1.9 cm. Distance from end of epinetron to front edge of *stephane* 2.8 cm. There are two holes at the closed end, below the bust, showing that this was the top and that the onos could be hung up. Such holes (added after the potter had delivered the onos) are lacking in many examples, and so were not essential. Sometimes they are in the middle of the top end, sometimes to right or left, sometimes at the lower end, sometimes in the female head. Our onos is more than a half cylinder, such as most onoi are. Only one (Appendix, No. 7) is exactly a half cylinder.

<sup>2</sup> *Ep.* 1892 (1893), pp. 247-255, pl. 13.

<sup>3</sup> *Ibid.*, pl. 13, 2, repeated in illustrations often, as for example, in *DS.*, s.v. *onos*, p. 201, fig. 5407; *AM.* xxxv, 1910, p. 324, fig. 1; Robert, *Archaeologische Hermeneutik*, 1919, p. 96, fig. 78; British Museum, *A Guide to the Exhibition Illustrating Greek and Roman Life*,<sup>3</sup> 1929, p. 135, fig. 149; Picard, *La Vie privée dans la Grèce classique*, 1930, pl. xxxiii, 3.

<sup>4</sup> *BSA.* xi, 1904-5, p. 235.

<sup>5</sup> Hauser, *JOAI.* xii, 1909, p. 84, thinks that red wool was represented on the onos, but has disappeared through corrosion of the surface.

<sup>6</sup> *Archaeologische Hermeneutik*, p. 96.

<sup>7</sup> Metropolitan Museum, *The Daily Life of the Greeks and Romans*, 1941, p. 37.





FIG. 1.—AN ATTIC EPINETRON IN THE ROBINSON COLLECTION



FIG. 2.—ANOTHER VIEW OF THE ATTIC EPINETRON IN THE ROBINSON COLLECTION



a pottery guard, called epinetron or onos, was placed on the knee and the fibers rubbed over it." It seems more probable that the epinetron was employed to prevent the twisting thread or roves or dirty fleeces, such as the five the husband in Theocritus xv, 20, has bought for Gorgo, ἔργον ἐπ' ἔργῳ, from rubbing (Hesychius says, τρίβουσιν) against the clothing of the woman who was preparing or carding the wool for spinning and weaving.<sup>8</sup> Certainly the onos was not used on the naked knee to prepare the already spun wool for the loom, as Engelmann believes.<sup>9</sup> Robert, as I have said, settled the question of the use of such objects, which had been interpreted as roof-tiles, tiles for tombs, drinking vessels, or even vases for the cottabus.<sup>10</sup> They were used by Chinese<sup>11</sup> women on the right knee for the same purpose, as we know from paintings of Pu-Qua of Canton, who lived at the end of the eighteenth century.

Some scholars believe that in early times an animal's skin or rough hair was put over the knee to protect the clothing and that the scales or circles and the roughness found on many examples have this significance. Later on, in this article, I shall hazard the idea that they perhaps suggest the scales of Athena's aegis; but if, as Six<sup>12</sup> believes, they represent a donkey's fur, since some women wore garments of camel

<sup>8</sup> Cf. Xanthudides, "Epinetron," *AM.* xxxv, 1910, pp. 323-334, with illustrations from modern life (fig. 3, "Aufhäufen der Wolle;" fig. 4, "Befestigen der Wolle am Rocken"). Cf. also Lillian M. Wilson, *The Clothing of the Ancient Romans*, p. 16. On the subject of carding, sewing, weaving, etc., cf. Blümner, "Onos und Epinetron, ξάλειν and νέειν," *JOAI.* xiii, 1910, Beiblatt, 90-94, 275-278 (thinks ξάλειν means "das Reiben des Vorjarns auf dem Epinetron"); cf. Lang, *ibid.*, pp. 245-251; Hauser, *ibid.*, pp. 269-275. Hauser objects to Blümner's distinction between ὄνος and ἐπινήτητρον. On epinetron, cf. Xanthudides *l.c.* In *BMM.* iii, 1944, pp. 110-112, Miss Milne publishes a sixth-century eye cylix, which I knew in Hirsch's collection in Paris (*Olynthus*, x, p. 374, n. 106, where much literature is cited on spinning), now in the Metropolitan Museum. The Tarentine inscription says: Μελώσας ἡμὶ νικατήριον. ξάλωσα τὰς κόρας ἐνίκη. Contests evidently were held in carding and wool working and show that respectable Athenian women (and not merely heterae) spun and took pride in domestic pursuits. On distaff and spindle and other spinning implements cf. Blümner, *Technologie*, i<sup>2</sup>, pp. 120 ff.; Beazley, *JHS.* li, 1931, p. 121; Gow, "Κλωστήρ, Spindle," *CR.* lvii, 1943, p. 109; *Olynthus*, x, pp. 374-377 with the many references cited there. The meaning of κλωστήρ as distaff should be added in the *Greek-English Lexicon* and the meaning, spindle, not wrongly cited from Apollonius Rhodius, *Argonautica*, iv, 1062. I believe that such practical terracotta epinetra as mine were actually used and not merely elegant, decorative and precise imitations of onoi in better material, a harder clay, or metal (Hartwig, *Εφ.* 1897, p. 142), or wood, such as modern Cretan ones are made of. Cf. Xanthudides (*l.c.*, p. 326, n. 2); also Lechat, *REG.* xi, 1898, pp. 222-224 (used for wedding presents and often dedicated on the Athenian acropolis or placed in graves). They are not too beautiful for ordinary everyday use by art-loving Athenian women. Cf. also Miss Richter, *BSA.* xi, 1904-05, pp. 233-234; Hauser, *JOAI.* xii, 1909, p. 84. The only dissertation or monograph which I know on the onos is that of Margarete Lang, *Die Bestimmung des Onos oder Epinetron*, Berlin, 1908 (in Hungarian in *Archeologiai Értesítő*, Budapest, 1907). Nowhere has there yet been published an up-to-date list of onoi. Benndorf, *Griechische und Sicilische Vasenbilder*, p. 71, knew only nine examples. Dumont et Chaplain, *Les Céramiques de la Grèce propre*, p. 381, added four to the list of Studniczka, *JdI.* ii, 1887, p. 69, speaking of 21 examples, 14 b.f., 6 r.f., 1 uncertain. Miss Lang, *op. cit.*, p. 12, gives a list of 12 in Athens with measurements.

<sup>9</sup> *PW.* xxvii, 1907, cols. 233-234.

<sup>10</sup> For example, Furtwängler, *JdI.* i, 1886, p. 153; *Sammlung Sabouroff*, pl. LII; Walters, *Catalogue of the Greek and Etruscan Vases in the British Museum* ii, 1893, p. 79, B96 (No. 415 in the Life Room); Studniczka, *JdI.* ii, 1887, pp. 69 f.; Rayet et Collignon, *Histoire de la Céramique grecque*, p. 389; Dumont et Chaplain, *op. cit.*, i, pp. 381-383, pls. xix-xx (called imbrex).

<sup>11</sup> Feldhaus, "Der Onos in China," *AA.* xxxii, 1917, pp. 10-13, fig. 1: cf. also Kowalski, *Eos* xxi. Miss Lang, *op. cit.*, p. 55, n. 2, quotes Director Frauberg of the Gewerbemuseum in Düsseldorf as saying that no such implements were used in mediaeval or modern times.

<sup>12</sup> *JOAI.* xv, 1912, pp. 107-108.



skin and the skin of an ass was also used, it might explain the peculiar name, ὄνος, which was employed for such objects. This would give meaning to the name<sup>13</sup> as used by Pollux vii, 32 (ἐφ' οὗ δὲ νήθουσιν ἢ νῶσιν, ἐπίνητρον καλεῖται καὶ ὄνος) and x, 125, as well as Hesychius s.v. ὄνος and ἐπίνητρον<sup>14</sup> and the σκεῦος in Aristotle's *Top.* i, 15, 107a, 18. Pottier explains that the right leg with the epinetron on it looked like an ass. "La form en dos d'âne explique le nom populaire donné à cet accessoire, ὄνος."<sup>15</sup> ὄνος can also mean a rough striated upper grinding stone, such as we found at Olynthus.<sup>16</sup> The ideas of roughness and of work seem to be suggested and make ὄνος an appropriate term for an implement with a rough surface, which was used for working the wool.

Strictly speaking, such objects should not be considered under the heading "Attic Vases," but they, as well as the pinakes, are products of Athenian ceramic art and trade. It is better, in view of the fact that they are of the same style of decoration and the same fabrication, to include them in such a classification,<sup>17</sup> especially since some, such as the masterpiece from Eretria, published by Hartwig,<sup>18</sup> ἐν τῶν καλλίστων κειμηλίων τοῦ Ἑθνικοῦ Μουσείου (1629) are chefs d'oeuvres of the Athenian painter. The one from Eretria pictures in red-figured style beautiful scenes of the erotic contest of Peleus with Thetis (the names of the figures given) and other scenes connected with Aphrodite, with marriage, and with the bride Alcestis. At the closed end is a plastic female bust, as on our onos, but with bare breasts. This is generally interpreted as Aphrodite.<sup>19</sup> This onos is included in that epoch-making volume of 1186 pages, *Attic Red-Figure Vase Painters* (Oxford, 1942)<sup>20</sup> by Professor John Davidson Beazley, the world's undisputed greatest authority on Attic vases, the ἀττικῶτατος of ceramists, to whom I dedicate this μικρὸν ἀντίδωρον ἀντὶ μεγάλου. It was this onos which gave the name "the Eretria Painter"<sup>21</sup> to the artist to whom Furtwängler<sup>22</sup> and Beazley<sup>23</sup> assigned some 76 vases. To this miniaturist the great Meidias Painter and other Attic vase painters of the end of the fifth century B.C. were greatly indebted. This masterpiece dates 440-430 B.C., but the Baltimore example is earlier.

Such onoi are surely not late Mycenaean, as was suggested by Xanthudides with regard to three or more onoi, all from the same necropolis near Kameiros in Rhodes.<sup>24</sup>

<sup>13</sup> Jones-McKenzie-Liddell-Scott, *A Greek-English Lexicon*, s.v. vii, 4, wrongly translated the Pollux passages as spindle or distaff.

<sup>14</sup> ὄνος. ἐφ' οὗ τὴν κρόκην νήθουσι. ἐπίνητρον, ἐφ' οὗ τὴν κρόκην τρίβουσιν. *Etym. Mag.*, 362, 2, ἐπίνητρον—τὸ ἐπὶ τῶν γονάτων, ἐφ' οὗ τὴν κρόκην ἔνηθον.

<sup>15</sup> *DS.* s.v. p. 201.

<sup>16</sup> Cf. *Olynthus* viii, pp. 326-334, and xii, pp. 217-218 and "Reference List of Some Greek Words concerned with the Greek House," s.v. ὄνος.

<sup>17</sup> Such a shape is naturally not given in Richter-Milne, *Shapes and Names of Athenian Vases*, 1935. Hoppin, *Handbook of Attic Red-Figured Vases* i, p. 345, speaks of the "Painter of the Epinetron from Eretria in Athens" and "the class of vases called onoi."

<sup>18</sup> *Ep.* 1897, pp. 128-142, pls. 9-10.

<sup>19</sup> So Hartwig, *Ep.* 1897, pp. 139-141.

<sup>20</sup> P. 726, no. 27. Cf. also Cook, *Zeus* iii, p. 389, n. 3b; p. 391, fig. 258.

<sup>21</sup> Pollak, *Arch. Epig. Mitt. aus Oes.*, 1895, p. 21 (see also Hartwig, *l.c.*, p. 140), thought that Xenotimos was the painter of the Eretria onos.

<sup>22</sup> *FR.* i, pp. 290-291.

<sup>23</sup> *ARV.* pp. 724-732. In his first edition, *Attische Vasenmaler*, pp. 428-429, Beazley classified many under the "Lemnos Painter," but in *Vases in Poland*, p. 61, he changed to "The Eretria Painter."

<sup>24</sup> *AM.* xxxv, 1910, pp. 333-334, figs. 6, 7 (given by Biliotti to Karo). A second one is in Berlin, Furtwängler, *JdI.* i, 1886, p. 153, no. 2983 (without plastic bust). A third is in the Ashmolean Museum, *AA.* xxiv, 1909, p. 426, where Evans says, "A good specimen of a Mycenaean onos from Rhodes."



Furtwängler had already recognized a local Rhodian style of the fifth century B.C. and Blinkenberg,<sup>25</sup> a great Danish authority on Rhodes, noted that a Mycenaean date is impossible and that such onoi of the sixth and fifth centuries have neither predecessors nor successors. The onos was another of many Attic inventions and evidently was not continued in use after 400 B.C. Otherwise, more than one piece of an onos (and that of the fifth century) would have been found at Olynthus and on other fourth-century sites. Such Attic onoi were exported to neighboring Eleusis, to Boeotia, and even to Rhodes. One was found by the Danes in the sanctuary of Athena Lindia,<sup>26</sup> but Rhodes herself made local imitations,<sup>27</sup> among which are one in Berlin, the two published by Xanthudides, one in Copenhagen, published by Blinkenberg,<sup>28</sup> likewise with two holes at the closed end for suspension of the onos, all from the same cemetery of Kameiros. The last example has a maeander pattern along the edges of the two long sides and at the closed end. The Baltimore onos also has a simple black maeander along the edge of one long side and at the closed end above a back palmette design, the details of which can be seen in fig. 1. The palmettes, enclosed in a black line, are arranged alternately with the petals pointing upward and downward. On the other long side (fig. 2), instead of a maeander, is a design of seven palmettes, alternately facing to left (four of them) and downward (three of them). The volutes at the base of the palmettes are incised and connected by a curving black line. A painted thick black line crosses the onos just below the projecting rim at the open end. I am reminded of a lekythos in my collection, which I published in the *CVA*. Robinson Collection, fasc. 1, p. 53, pl. xxxviii, 7 a-c and attributed to Beazley's Diosphos Painter,<sup>29</sup> and of another lekythos with similar maeander and palmettes attributed by Miss Haspels also to the Diosphos Painter,<sup>30</sup> whose latest period would be contemporary with that of the Baltimore onos. It likewise has a black elaborate design of palmettes encircled by their own stems, combined with a running maeander just below the shoulder. The palmettes face away from one another, not, as on the Baltimore onos, toward one another; the maeander runs to left, instead of to right, but the types of palmettes and of maeander are similar. It is possible that the Diosphos Painter in his later years was responsible for the Baltimore onos. He and his contemporary, the Sappho painter, made several onoi, the Sappho painter surpassing him at onoi.<sup>31</sup> But the Diosphos painter is a close second.

An interesting feature of the Baltimore onos is the plastic head which protrudes from the closed end, and which helps in dating the onos. Such heads occur on other onoi. On three examples in Athens published by Dumont et Chaplain (*Les Céra-*

<sup>25</sup> *AM*. xxxvi, 1911, pp. 145-147.

<sup>26</sup> *Bulletin de l'Académie royale des sciences et des lettres de Danemark*, 1905, p. 119.

<sup>27</sup> One in the Louvre: Pottier, *Catalogue des vases antiques* i, p. 172, no. A487; Lang, *op. cit.*, p. 16 (*AM*. xxxvi, 1911, p. 146, fig. 1, with scales on top and plastic Athena head with stephane at closed end). Cf. below, p. 490, nos. 32, 35-39.

<sup>28</sup> *AM*. xxxvi, 1911, pp. 147-148, figs. 2, 3; *CVA*. Copenhagen, Musée National II-III, pl. 80, 1.

<sup>29</sup> Cf. also Beazley, *Greek Vases in Poland*, p. 79; Miss Haspels, *Attic Black-Figured Lekythoi*, p. 235, no. 67.

<sup>30</sup> *Op. cit.*, pp. 100, 110, 233 (Athens 2213), pl. 36, 5.

<sup>31</sup> Cf. Miss Haspels, *op. cit.*, pp. 104-106; p. 237, no. 118 (Louvre, MNC 624-[M 10], = Lang, *op. cit.*, p. 19, fig. 4, attributed to the Diosphos painter).



*miques de la Grèce propre* i, pp. 381–383, pls. xix and xx,<sup>32</sup> under the title “Tuiles peintes des scènes de la vie familière”), is painted an archaic female head with snood and earrings, the snood decorated with pointed leaves. The head is there (p. 383) interpreted to be the protectress of the dead, Demeter or Kore. On earlier examples the head is a plastic bust which later gave way to a painted head or even to mythological scenes, such as that of Bellerophon on the winged Pegasus spearing the Chimaera.<sup>33</sup> There are several examples of the plastic female head on black-figured onoi,<sup>34</sup> on some red-figured onoi,<sup>35</sup> and even on Rhodian local imitations.<sup>36</sup>

As has been said, Dumont and Chaplain interpreted the head as that of Demeter or Kore, and Hartwig<sup>37</sup> suggested that the beautiful bust on the onos of the Eretria Painter was that of Aphrodite. It seems to me that Athena Ergane, the goddess of work, would be a more suitable goddess to be represented on these instruments of work. The incised scale-pattern (λεπίδες, φολίδες), which is invariably present on the backs of the majority of them and on the Baltimore onos with its many blackened depressed horseshoes and a cutting in the center of each, presents the necessary roughened surface for rubbing the roves of the wool. The suggestion of Six mentioned above<sup>38</sup> that these scales represented a donkey's fur, because the epinetron was also called an onos, is dubious. If the head is that of Athena, the scales might be the snake scales of Athena's aegis, on which Professor Cook has collected so many details.<sup>39</sup> Perhaps in origin it was a snake-skin or owl-skin rather than a goat's skin, certainly not a donkey's skin. Athena was the patron of women's work and her main occupation was working wool and spinning. Cook<sup>40</sup> quotes a tradition that Athena's bird, the owl, was “an old weaver spinning with silver thread.” Perdrizet believed that the owl spinning was Athena Ergane.<sup>41</sup> Kretschmer<sup>42</sup> even went so far as to suggest that Athena's name was derived from ἄθανον = ἄττανον and that this gave rise to the idea of Athena as “eine Töpfergöttin,” the later Athena Ergane. The clay vessel from which Athena received her name may have been conceived as a “Fetisch und Symbol,” as a ἄγιον σκεῦος. The Athenians were the first to give her the epithet Ergane<sup>43</sup> and first invented the

<sup>32</sup> According to Beazley, pl. xx is the work of the Painter of Berlin 2624; pl. xxix, 1–2 is near his style; pl. xxix, 3–5 is the work of the Painter of Munich 2335; *ARV.*, pp. 759, 782.

<sup>33</sup> *Ep.* 1892, pl. 13; Lang, *op. cit.*, p. 3, fig. 1.

<sup>34</sup> *A Guide to the Exhibition Illustrating Greek and Roman Life*, Brit. Mus., 1929, p. 135, fig. 150 (Picard, *op. cit.*, pl. xxxii, 2; Pfuhl, *MuZ.* iii, p. 350, fig. 769); Haspels, *op. cit.*, pls. 34, 2; 36, 2 (with a white flying figure painted on the end at the side of the female bust); *B.M.A.* vi, 1911, p. 31, fig. 2 (with incised scales on top, ivy leaves at open end, with b.f. scenes on both sides showing women pulling apart piles of wool and preparing it for spinning; plastic female head at closed end, illustration repeated in McClees, *Daily Life of the Greeks and Romans*, 1941, p. 38, fig. 44).

<sup>35</sup> *Ep.* 1898, pl. 9; *WV.* 1888, pl. viii, 5 (restored fragment, Benndorf, *op. cit.*, pl. xxxvii, 1), with bridegroom and bride seated side by side in a low cart, preceded by the προηγμένης or Hermes with his caduceus and followed by a young man on horseback. The fragment is restored with scale pattern on top and female bust at end. Cf. also, Miss Lorimer “The Country Cart of Ancient Greece,” *JHS.* xxiii, 1903, p. 151.

<sup>36</sup> *AM.* xxxvi, 1911, p. 146, fig. 1 (Louvre).

<sup>37</sup> See note 19.

<sup>38</sup> See note 12.

<sup>39</sup> *Zeus* iii, pp. 837–844.

<sup>40</sup> *Ibid.* iii, p. 795, n. 6.

<sup>41</sup> *Mélanges Perrot*, 1903, pp. 264 f. Cf. also Jesson in *RE.* vi, pp. 428–430.

<sup>42</sup> *Glotta* xi, 1921, pp. 282–284.

<sup>43</sup> Pausanias i, 24, 3. πρώτοι μὲν γὰρ Ἀθηναῖν ἐπωνόμασαν Ἐργάνην. Robert in *Ep.* 1892, p. 255, says: εὐνόητον εἶναι ὅτι σκεὺς κατ' οἶκον ἐργασίας καὶ εἰς γυναικείας θεότητας τὴν Ἀθηναῖν Ἐργάνην ἐν τῇ Ἀκροπόλει καὶ τὴν Δήμητρα ἐν Ἐλευσίνι, ὡς ἀναθήματα προσεφέροντο καὶ εἰς τοὺς τάφους τῶν οἰκοδεσποινῶν κατετίθεντο. Many onoi or fragments of them have been found on the



onos, which perhaps symbolized this idea. The onos was an Athenian σκεῦος, or instrument of work. The cap-like headdress can be compared with that of a terracotta Athena in Athens,<sup>44</sup> which may represent the olive-wood xoanon of Athena on the acropolis, similar to that at Troy on which the priestess Theano laid a precious robe.<sup>45</sup> Perhaps garments, made from the wool worked on the onoi, were dedicated not only in the precinct of Brauronian Artemis, but also in the precinct of Athena Ergane on the acropolis, if not in a temple, in her precinct in or near the Chalkotheke.

The style of the bust helps us to date the onos between 490 and 480 B.C., and this fits in with the date of the Diosphos Painter and with other arguments presented above. It is reminiscent of many fifth-century archaic terracotta masks (which also

often have two holes for suspension), such as those which I have excavated at Olynthus.<sup>46</sup> The wavy hair and the loop in front of the ear resemble coiffures on plastic vases in the form of a female head, such as the one in the Metropolitan Museum;<sup>47</sup> on some of the korai in the Acropolis Museum;<sup>48</sup> on the seated goddess in Berlin (ca. 480 B.C.),<sup>49</sup> on the nude female flute-player on the "Ludovisi Throne" in Rome (480–470 B.C.);<sup>50</sup> on the marble head of a Greek goddess in the Metropolitan Museum and parallels cited by Miss Richter<sup>51</sup> (ca. 460 B.C.). The style on these last works of art and on the so-called Lemnian Athena seems to be more advanced than that of our onos. The date suggested by parallels in sculpture, vases, and other terracottas is confirmed with some precision by comparison with a datable Athenian coin, here shown in fig. 3. It is the famous decadrachm of the Warren Collection,<sup>52</sup> which was minted ca. 485 B.C. This was part of the dole of 10 drachmas, which before 483 B.C. each Athenian citizen, instead of paying income tax, had received as a bonus once a year.<sup>53</sup> Since, as Herodotus<sup>54</sup> says, some 30,000 citizens



FIG. 3.—SICILIAN DECA-  
DRACHM OF THE WARREN  
COLLECTION

Athenian acropolis, in the sanctuaries of Brauronian Artemis and of Athena Ergane, a few fragments at Eleusis, and several onoi in graves. Miss Lang, *op. cit.*, p. 69, believes that the onoi actually used were of wood and that the terracotta ones were "Paradestücke, Hochzeitsgeschenke" and offerings in the graves and sanctuaries. I see no reason why those preserved in terracotta could not have been used.

<sup>44</sup> Cf. Roscher, *Lexikon* i, p. 688; Seltman, *CAH.*, Vol. of Plates i, 206 a.

<sup>45</sup> Homer, *Il.* vi, 87, 302 f. The ancient image of Brauronian Artemis was clothed in robes woven and dedicated by women, *Paus.* i, 23, 7; *I.G.* ii–iii, 2 1514–1531. Cf. Frazer, *Pausanias* ii, pp. 547 ff.; iii, pp. 592 ff., and for the use of garments for an image of Demeter, cf. my article, "A New Arcadian Inscription," *CP.* xxxviii, 1943, pp. 191–199, esp. p. 195.

<sup>46</sup> Cf. *Olynthus* iv, pl. 4, 17a, etc.; vii, pls. 1 ff. Those found at Olynthus in 1934 and 1938 are still unpublished. Cf. also Winter, *Typen der figürlichen Terrakotten* i, p. 236, 6; p. 237.

<sup>47</sup> Richter-Milne, *op. cit.*, fig. 187.

<sup>48</sup> For example, No. 680: Payne-Young, *Archaic Marble Sculpture from the Acropolis*, pl. 54 (perhaps as early as 530–520 B.C.).

<sup>49</sup> Richter, *The Sculpture and Sculptors of the Greeks*, figs. 65, 161.

<sup>50</sup> Lawrence, *Classical Sculpture*, pl. 31.

<sup>51</sup> *B.M.A.* i, 1942–1943, pp. 207–212, figs. 1–14. Fig. 10 shows an Athena on a vase in the Louvre with a loop of hair in front of the ear and wearing an aegis with scales like those on the Baltimore onos.

<sup>52</sup> Seltman, *Greek Coins*, pl. xii, 2.

<sup>53</sup> *Ibid.*, p. 93.

<sup>54</sup> *V.* 97; vii, 144 (ὀρχηδὸν ἑκάστος δέκα δραχμᾶς); Plutarch, *Them.* iv.



came up one after another to get their 10 drachmas, the paymaster had difficulties; and so the mint issued two new denominations, the decadrachm and didrachm in addition to the old tetradrachms to enable the payment to be easily made. Profile, nose, lips, protruding eyes (with outer upper corner not overlapping the lower lid), chin, and the so-called archaic smile are similar on this decadrachm and on the head on our onos. Seltman's<sup>55</sup> statement about the coin might apply to our onos: "On the rare coins issued between 488 and 480 B.C. (pl. XII, 17, 18), the loop of hair in front of the ear was the more prominent, the wave from over the forehead passing beneath it," as on the Baltimore onos. The head of Athena on the special decadrachms of the dole exactly resembles that on the current tetradrachms,<sup>56</sup> but the reverse has a facing owl. After 478 B.C.

the loop of hair is inside, not over the wavy hair over the forehead. I reproduce (fig. 4) in the original size such a tetradrachm in my collection, which dates after 478 B.C.<sup>57</sup> Here are seen on the obverse (fig. 4a) three upright olive leaves on the helmet of Athena, which



FIG. 4A, B. — SILVER TETRADRACHM IN THE ROBINSON COLLECTION

continued to be represented on Athenian coins for nearly three centuries. On the reverse (fig. 4b) a "tiny waning moon" as Seltman<sup>58</sup> calls the crescent, appearing on coins for the first time after the battle of Marathon, is seen to the left of the owl's head. This is a reference to the Athenian victory at the battle of Marathon, which was fought when the moon was waning, whereas the Pan-Hellenic battle of Salamis was fought with a full moon.<sup>59</sup>

Because of the resemblance to coins dating 490–480 B.C. in the features of the face and especially in the loop of hair which passes over the waves of hair over the forehead, and because of similarity to terracottas and sculptures, and for other reasons given above, I am inclined to date this onos 490–480 B.C. and attribute it to the Diosphos Painter, who was so fond of the combination of palmette design with the maeander. I leave it to the master, to whom this number of the *AMERICAN JOURNAL OF ARCHAEOLOGY* is dedicated, to decide.

THE JOHNS HOPKINS UNIVERSITY

DAVID M. ROBINSON

<sup>55</sup> *Op. cit.*, p. 108.

<sup>56</sup> *Ibid.*, pl. XII, 17, 18. In the Boston Museum of Fine Arts I have noticed eight or more Athenian coins (several tetradrachms, one with owl in front view) which show the loop of hair in front of the ear and they date before 450 B.C.

<sup>57</sup> *Ibid.*, pl. XVI, 1, 9, 10. Such a loop is frequent on coins of Syracuse dating 485–478 B.C. Cf. e.g. BMFA, VIII, 1910, p. 35; xxviii, 1930, p. 10, fig. 2. In my collection are an early coin of Thurii and several Sicilian coins which also show this loop.

<sup>58</sup> *Op. cit.*, p. 92.

<sup>59</sup> Cf. Seltman, *Athens, its History and Coinage*, C. XIV; Munro, *JHS*, xix, 1899, pp. 185 ff.; Plutarch, *de Gloria Athen.* 7.



## APPENDIX

## LIST OF ONOI

## BLACK-FIGURED

1. Adria. Formerly in Bocchi collection at Adria, where it was found, fragment mentioned by Schöne, *Museo Bocchi*, p. 32 (top); Haspels, p. 228, 54 bis. On drawing in a manuscript of Codex Vindobonensis used by Schöne, now in the possession of Professor Beazley. Chariot to right. By the Sappho painter.
2. Athens, 1419 (2183); Collignon-Couve, *Catalogue des vases peints du Musée National d'Athènes*, 842. Studniczka, *JdI*, ii, 1887, p. 69 D, confuses this vase (Collignon 226) with some other. See Dumont-Chaplain, p. 383, n. 1. Scale pattern on top, olive wreath near closed end. A. Three women pouring libations. B. Three Maenads dancing.
3. Athens, 1359 (2184), from Tanagra, 'Ep. 1874, p. 345, pl. 11; 1892, p. 247; Benndorf, *Gr. und Sic. Vasenbilder*, p. 71; Collignon-Couve, p. 269, 841; pl. 34, no. 53; Haspels, *Attic Black-Figured Lekythoi*, pp. 95, 104-106, 228; *JdI*, ii, 1887, p. 69, n. 1. C. Cf. also Lang, *op. cit.*, p. 37, fig. 13. A. Three Amazons arming. B. Similar scene, recalling Amazons on r.f. hydria by Hysis in Munich (*FR*, pl. 82). Scale pattern on top, maeander above scene, lotus-buds below open end. At end in mat terracotta technique, female head in relief, with stephane, reminding one of heads on kyathoi, at end of handle. On either side of the head a winged figure, painted in white. By the Sappho painter. Sixth century B.C.
4. Athens, Dumont-Chaplain, p. 383, pl. xix, 6. In *JdI*, ii, 1887, p. 69, n. 1, D. Studniczka wrongly calls this Collignon, no. 226 and refers to Dumont-Chaplain, pl. xix, 6. Scale pattern on top, maeander above main scene, rays above open end. Bearded man standing before seated woman with kalathus between them, female with plemochoe standing before bearded man holding stick and seated on an okladias.
5. Athens, from Tanagra, not in catalogue, Dumont-Chaplain, p. 383, n. 1 (not C. 226-Collignon-Couve 842); pl. xix, 6. A. Standing man and seated woman, standing woman with plemochoe and seated man on okladias. Above scene maeander and on top scales.
6. Athens. Five small b.f. fragments, found on acropolis, east of Parthenon (L west of Erechtheum, 1886) and belonging to three different onoi mentioned by Benndorf and Studniczka, *JdI*, ii, 1887, p. 69, n. 1, G, H, I, K, L. G, confronting seated woman and man. K, upper part of seated woman. Other fragments have only decorative motives. L, seated woman. (Not in Graef-Langlotz, *Die Antiken Vasen von der Akropolis*). Some 31 fragments of onoi have been found on the acropolis, but I am unable to locate them in any publication, though Miss Lang, *op. cit.*, p. 5, quotes Graef as saying that 30 b.f. onoi were found on the acropolis. Several have also been excavated recently in the Athenian agora.
7. Athens, fragment from Tanagra, Collignon-Couve 843; Lang, *op. cit.*, p. 11, fig. 2. Exactly half of a cylinder. Between two zones of points, a zone of lozenges.
8. Athens, frag., Collignon-Couve, 844. Female head in relief, with stephane decorated with red zigzags. Black palmettes, with small black birds in the intervals. Cf. Lang, *op. cit.*, p. 39, fig. 14. Probably by the Diosphos painter.
9. Baltimore, Robinson Collection, from Athens, published in this number of *AJ.A.* By the Diosphos Painter, 490-480 B.C.
- 9a. Bonn(?). Black-figured fragment formerly in possession of Count Tyszkiewicz, Bonn.
10. Berlin, 4016, from Attica, Furtwängler, *Beschreibung der Vasensammlung*, p. 1018, 4016 (wrongly called "Firstziegel"); *Sammlung Sabouloff* v, 1, pl. 52, 1; *JdI*, ii, 1887, p. 69, n. 1, B; Pfuhl, *MuZ.*, fig. 769; Lang, *op. cit.*, p. 31, figs. 10, 11. A. Two groups of two confronting women seated. B. Two groups of confronting seated woman and man. Scale pattern on top, lotus buds at either end of scenes. At end a plastic archaic female head with high stephane. Had two holes for suspension.
11. Eleusis, fragments from Eleusis, 907, Inv. 277-279, 'Ep. 1885, pl. 8, 1-3; 1892, p. 247, n. 1, *JdI*, ii, 1887, p. 69, n. 1, E; Pfuhl i, p. 307; Broneer-Kourouniotes, *Eleusis*, p. 115; Haspels, pp. 104, 106, 228 (54), pl. 34, 1. A. Beautiful scene of armed Amazons, one on horseback, one beside her horse. B. Two Amazons on foot, arming, one blowing a trumpet. By the Sappho painter, sixth century B.C.
12. London, British Mus., Walters, *Cat. of Vases in the Brit. Mus.*, ii, p. 266, B. 598; *JdI*, ii, 1887, p. 69, n. 1, A, called an imbrex or roof-tile (Dachziegel), pictured in Birch, *History of Ancient Pottery*, p. 197. A, symposium, Dionysus on couch conversing with Ariadne seated on an okladias. B. Two groups of Maenads with a pithos between them. Illustrated in Lang, *op. cit.*, p. 21, fig. 5. Scale pattern on top. At the end is a female head with sphendone, in relief.



13. London, Brit. Mus., Walters ii, p. 266, B. 597, called imbrex or roof-tile. A, youth seated on an okladias, conversing with woman on okladias, seated woman conversing with bearded man. B, similar design, pictured in Brit. Mus. *Guide to Exhibition ill. Gr. and Rom. Life*, 1929, p. 135, fig. 150. Incised scale pattern on top. At closed end a female figure in relief, with spendone.
14. London, Brit. Mus., Walters ii, p. 79, B. 96, there called a roof-tile (also Furtwängler, *JdI.* ii, 1887, p. 153); but rightly labelled in *Guide to Greek and Rom. Life*, p. 135. Unglazed buff clay painted in black, with tendrils, palmettes, geometrical designs and tongue pattern.
15. New York, Metropolitan Museum, *BMA.* vi, 1911, p. 31, fig. 2 (also p. 36); McClees, *Daily Life of Greeks and Romans*, p. 38, fig. 44. Incised scale pattern on top, two leaves of laurel below at open end, plaster female head with stephane, at closed end. A. Three seated women, two with one leg held up, pulling apart wool, which is brought to them by other women. B. Similar. At the end archaic female head in relief. Probably by the Sappho painter.
16. Paris, Louvre, from Athens (MNC 624), Lang, *Die Bestimmung des Onos*, p. 19, fig. 4; Dumont-Chaplain, p. 381, n. 3; Haspels, p. 237 (118). A. Amazon taking shield down from wall, mounted Amazon leading second horse near her, Amazon on foot. Similar style to that of the fragments from Eleusis (no. 11). B. Interior of gynaeconitis, five women, two seated working wool and spinning. By the Diosphos painter.
- 16a. Poland, 225, *CV.A.* Musée Czartoryski, pl. 15, 5. On either side two couples consisting of a seated man and woman. Rays at either end, scales on top, plastic female head at end. Cf. nos 10. and 13.
- 16b. Rhodes, from sanctuary of Athena Lindia, *Bulletin de l'Académie Royale des sciences et des lettres de Danemark*, pp. 118-120, fig. 50. Seated woman to r. spinning, dog behind stool, bearded man in front of woman. Scales on top.

## RED-FIGURED ONOI AND NATIVE RHODIAN B.-F. ONOI

17. Athens, 1629 (Collignon-Couve, pp. 503 ff.; no. 1588), a masterpiece from Eretria, Δελτ. 1892, p. 77; 'Εφ. 1897, pp. 129-142, pls. 9, 10; Pollak, *Arch. Epig. Mitt. aus Oes.*, xviii, 1895, p. 21, no. 21, attributed to Xenotimos; Roscher, *Lexikon* iii, p. 2119, 9; Pfuhl, ii, pp. 567, 570; iii, p. 220, fig. 561; *AM.* xxxii, 1907, p. 95, fig. 6; *JdI.* xli, 1926, p. 197, fig. 3; Dugas, *Aison*, fig. 14; *FR.* i, p. 290; Nicole, *Meidias*, p. 118, fig. 28 (B); *JOAI.* xxii, 1909, p. 95; *DS.* iii, p. 1650, fig. 4863 (B); iv, p. 201, fig. 5408; Ducati, *Midia*, p. 38, n. 3; Cook, *Zeus*, iii, pp. 389-391, fig. 258; Hoppin, *Handbook of Attic Red-Figured Vases* i, p. 345, 1; Beazley, *VA.* p. 180; Beazley and Ashmole, *Greek Sculpture and Painting*, fig. 108; Lang, *op. cit.*, pp. 12, 21; Beazley, *ARV.* p. 726, 27, by the Eretria painter (attributed formerly to Xenotimos). A. The bride Alcestis, in front of house-door, and others with two b.f. lebetes gamikoi, a b.f. loutrophoros, etc.; B. Aphrodite, Eros, Harmonia, Peitho, Hebe, Himeros. On end is painted Peleus and Thetis story. Figures are all named with inscriptions. Projecting from the closed end is a beautiful female bust, perhaps of Aphrodite. By the Eretria painter.
18. Athens, 2383 (Collignon-Couve, 1590) from Eretria, Δελτ. 1890, p. 9, no. 25; Lang, *op. cit.*, pp. 12, 25 (fig. 6), 29 (figs. 8, 9), 35; Beazley, *ARV.* p. 673, 20. A, women, B, women and man. Pointed end and plastic head in relief. By the Clio painter.
19. Athens, 2180 (Collignon-Couve, 1592), Dumont-Chaplain, pp. 381-383, pl. xx; Rayet et Collignon, *Histoire de la Céramique grecque*, p. 389, fig. 144 (side A), *JdI.* ii, 1887, n. 1, O; Lang, *op. cit.*, pp. 12, 23; Beazley, *ARV.* p. 759, 2. A, two groups of standing woman and youth; B, youth between women. Scales on top, olive wreath at either end of scene. Painted female head, wearing snood with five olive leaves, at closed end. Olives refer to Marathon perhaps. By the Painter of Berlin 2624.
20. Athens, Agora, P 7817, frag., Beazley, *ARV.* p. 759, 4, A, woman and man. By the Painter of Berlin 2624.
21. Athens, 1596 (Collignon-Couve, 1593), frag. from the Kerameikos; Δελτ. 1888, p. 27, no. 35; Beazley, *ARV.* p. 759, 1. B, women and youth. Miss Lang, *op. cit.*, pp. 12, 24, 25, fig. 6, speaks of fragments of two onoi. Near the Painter of Berlin 2624.
22. Athens, Agora, P 9426, Beazley, *ARV.* p. 759, 2. A, youth and woman. Near the Painter of Berlin 2624.
23. Athens, 2182 (Collignon-Couve, 1595), from Attica; 'Εφ. 1869, pl. 51 A; Dumont-Chaplain, pl. xix, 1-2; *JdI.* ii, 1887, p. 69, n. 1, N; Lang, *op. cit.*, p. 12; Beazley, *ARV.* p. 759, 3, A and B, olive leaves, scales on top, maeander at one end, olive wreath at other. Painted female head on end. Two holes in the end for suspension. Near the Painter of Berlin 2624.
24. Athens, 2181 (Collignon-Couve 1591), from Attica; 'Εφ. 1869, pl. 51 a; 1874, pl. 1a; Dumont-Chaplain, pl. xix, 3-5; *JdI.* ii, 1887, p. 69, n. 1, M; Lang, *op. cit.*, pp. 12, 23; Beazley, *ARV.* p. 782, 62. Scales on top, ivy wreath at either end, A, women; B, women. At closed end painted female head. By the Painter of Munich 2335.



25. Athens, 1615 (Collignon-Couve, 1594), frag. from Vélaniđeza. Δελτ. 1890, p. 19, no. 25. Lang, *op. cit.*, p. 12; A, standing woman before seated woman with calathus by her side. B, woman holding a calathus.
26. Athens, 5899 (Collignon-Couve 1589), from Attica, Πρακτικά, 1892, p. 101; Έφ. 1892, pp. 257-255; Lang, *op. cit.*, p. 12. Cf. above note 3 for publications which reproduce the scene of A, lady with onos on her right knee. B. Three women in the gynaikonitis. Scales on top, palmettes, tongue-pattern, and scene of Bellerophon on Pegasus slaying the Chimaera, painted on closed end. Shows influence of Parthenon frieze, 440-430 B.C.
27. Athens, frag. from cave on Parnes, Έφ. 1906, p. 106, fig. 6. Above, checker-board pattern. On one side in relief man on horse riding at full speed to left.
28. Berlin, 2624 (also 4016), from Athens; *JdI.* ii, 1887, p. 69, n. 1, P; Brendel, *Die Schafzucht im alten Griechenland*, Würzburg, 1934, pl. 66, 1; Lang, *op. cit.*, p. 40, fig. 15; Beazley, *ARV.* p. 758, 1. A, women and youth; B, the same; painted female head at end. By the Painter of Berlin 2624.
29. Berlin (?). Fragment in Benndorf, pl. xxxvii, 1, pp. 70 ff.; *JdI.* ii, 1887, p. 69, n. 1, I. Restored in *WV.* 1888, pl. viii, 5, 6 (wrongly called "Firstdeckziegel"); cf. also *JHS.* xxiii, 1903, p. 151. Incised scale-pattern on top, rays and laurel wreath above open end, meander near closed end on which is projecting female plastic head. Man on horseback, cart drawn by two mules with bride and groom and driver in it, preceded by the προηγητής, Hermes with caduceus moving to right but looking back. Plastic head at the end has two holes for suspension.
30. Berlin, 2983, from Rhodes, *JdI.* i, 1886, p. 153, fig. 2983 (wrongly called "Firstziegel eines Grabes"), perhaps also Berlin 309. Decoration consists only of parallel lines, no plastic head, no scenes as on Attic onoi. Local Rhodian imitation, fifth century B.C. (see no. 32).
31. Heidelberg, K 14, frag. from Athens, Beazley, *ARV.* p. 759, 3. A, youth. By the Painter of Berlin 2624.
32. Paris, Louvre (MNB 3024), from Rhodes; *Vente de la collection Bammerville*, 101; Dumont-Chaplain, p. 381, n. 3; Pottier, *Catalogue des vases antiques* i, p. 172, 487; *AM.* xxxvi, 1911, p. 146, fig. 1; *Archeologiai Értésítő* 1907, p. 401, fig. 12; Lang, p. 16. Incised scale pattern on top, female projecting head at closed end. Scenes from the life of women. Local Rhodian imitation of Attic ware, fifth century B.C.
33. Prague, fragment, in the University, pictured in Benndorf, *op. cit.*, p. 71. Cf. Lang, *op. cit.*, p. 24. Toilet scene, winged figure in front of lady with alabastron.
34. Rhodes, 13886, from Pontamo, *Clara Rhodos* ii, 1932, pp. 133-139, figs. 15-17, pls. iii-iv (colored). A. winged female figure to r., seated woman between white winged Erotes, lady running to r. Egg and dart above and below scene. B. woman to r., winged white Eros, pouring water from jar on hair of kneeling woman (white) to left. Egg and dart above, astragal below. Palmettes near open end. Tongue pattern and recurved appendage at closed end, on which is painted male figure with petasos on a white horse, throwing spear at target. Much worn from use. About 400 B.C.
35. Rhodes. Local ware in geometric style, but late, from Pontamo, *Clara Rhodos* ii, 1932, p. 140, fig. 18; *CVA:* Rodi ii, pl. 6, 3. Dotted crosses, wavy lines, quadruple spirals. Fifth Century B.C.
36. Rhodes, 12910. Local ware from Macri Langoni (Kameiros), *Clara Rhodos* iv, 1931, pp. 111-114, figs. 101, 103; *CVA:* Rodi, i, pl. 2, 5. Branch of bell-like flowers. Irregular parallel lines, floral motive. Pointed end. Two holes for suspension. All the native Rhodian onoi are in black-figured style, but probably date from the late sixth or fifth century B.C.
- 37-39. Other local Rhodian onoi without plastic heads, one in Ashmolean Museum at Oxford, *AM.* xxxv, 1910, p. 333; *AA.* xxiv, 1909, p. 426 (wrongly called by Evans "a Mycenaean onos"); another from Rhodes, formerly in Karo's collection, *AM.* xxxv, 1910, pp. 333-334, figs. 6, 7; another in Copenhagen, *AM.* xxxvi, 1911, p. 148, figs. 2, 3; *CVA.* Musée National ii-iii, pl. 80, 1.
40. Saloniki, curved part of an onos, P. 38.197 (fifth century B.C.) from the House of Many Colors at Olynthus (room a). Diam. 0.109 m. Buff clay. Design in red to brown glaze, consisting of broad vertical lines along the edge.
41. Athens, 11735 (CC). A child's onos or plaything. Lang, *op. cit.*, pp. 9, 12, without decoration, unpainted, left rough. Diam. 0.11 m., length 0.25 m. Two holes at lower end.



## THE LATE VASES OF HERMONAX

THIS article comprises a classification and consideration of those vases painted by Hermonax that appear to belong to his latest period. All the vases are in Beazley's list, *Attic Red-Figure Vase-Painters*, pp. 317-322. The illustrations are unpublished; all except figures 4, 5, 13, and 14 were kindly sent me by Professor Beazley. A number of observations, in this as in earlier papers, were made during a trip that was made possible by a grant from the American Council of Learned Societies.

Only one of these vases, an amphora in Würzburg, is familiar from adequate publications.<sup>1</sup> This and its closest congeners may be termed Group W. An amphora in Madrid is shown in figures 1-3.<sup>2</sup> Another is or was in Boulogne; information and drawings were courteously supplied by M. de Senlis (figs. 4-5).<sup>3</sup> Another is in Leningrad.<sup>4</sup> The amphora in Lancut<sup>5</sup> is not well known to me, but clearly goes with the others.

Among the features that connect these amphoras with one another and distinguish them from the earlier works of Hermonax, the most significant is the drawing of the frontal foot. Previously, in the work of Hermonax and of other painters since about 500 B.C., the toes were drawn as a series of regular arcs open at the bottom; now they are wide, irregular arcs open at the sides. This formula is found in Würzburg, Madrid, Boulogne and probably in Lancut; in the Leningrad amphora I think that no frontal foot occurs. The new type had no wide vogue outside Hermonax's work, but is approximated in some pieces by later painters (e.g., *FR.* 35, by the Kleophon Painter). Three of the four eyes in Würzburg and one of the two in Leningrad are drawn with a third line for the upper lid, which is not found more than once in all the earlier pieces. The Ionic himation does not occur in the group, whereas there is one peplos, in Würzburg, drawn in fairly free style. In the Leningrad amphora the two sides differ considerably in execution; this is hardly paralleled in Hermonax, but common in later work. And the handle-ornament of the Madrid vase is like that used on stamnoi of the Villa Giulia Painter and Polygnotos and his followers,<sup>6</sup> but not on stamnoi or other vases of Hermonax except in this case.

All the long chitons are "regular" formula, used without abrupt change long before Hermonax and long after him; the experiments of his earlier period no longer interest. Two men, Würzburg and Lancut, wear short belted chitons, very similar to each other and suggestive of the "Tarbell" formula,<sup>7</sup> but not transparent. Broad brown lines for the edges of garments<sup>8</sup> are used in the Madrid and Boulogne vases,

<sup>1</sup> Beazley no. 41; Langlotz no. 504, pls. 171, 172, 184; *FR.* 107, 2. Good condition, no restoration. Ht. 0.472 (Langlotz).

<sup>2</sup> Beazley no. 43; Leroux, *Vases grecs du musée de Madrid*, no. 172; Inv. 11098; Jacobsthal, *Ornamente*, pl. 81 a (the ornament at the handle). Good condition, apparently no restoration. Ht. 0.44 (Leroux).

<sup>3</sup> Beazley no. 42; museum no. 125. Slight restoration. Ht. 0.47.

<sup>4</sup> Beazley no. 38; museum no. 696, Stephani 1671; *Compte-Rendu*, 1875, p. 199, cf. 113 f. Unbroken, good condition. Ht. 0.50 (Hoppin).

<sup>5</sup> Beazley no. 40; *CVA.* Poland III, pl. 129, no. 4; *JHS.* 1936, p. 254. Much broken, foot modern. Ht. 0.493 (*CVA.*).

<sup>6</sup> Cf. Jacobsthal, p. 141.

<sup>7</sup> Cf. *Classical Studies . . . Oldfather*, pp. 74 and 81.

<sup>8</sup> Cf. *AJA.* 1938, p. 351.



probably somewhat in Würzburg; I am not sure about the other two. Hooked lines in outer garments, so abundant in the signed vases, occur somewhat in Madrid and Leningrad, hardly at all in Würzburg or in the other two as far as known. Ankles are all drawn in two marks. Outspread hands, also abundant earlier, do not occur

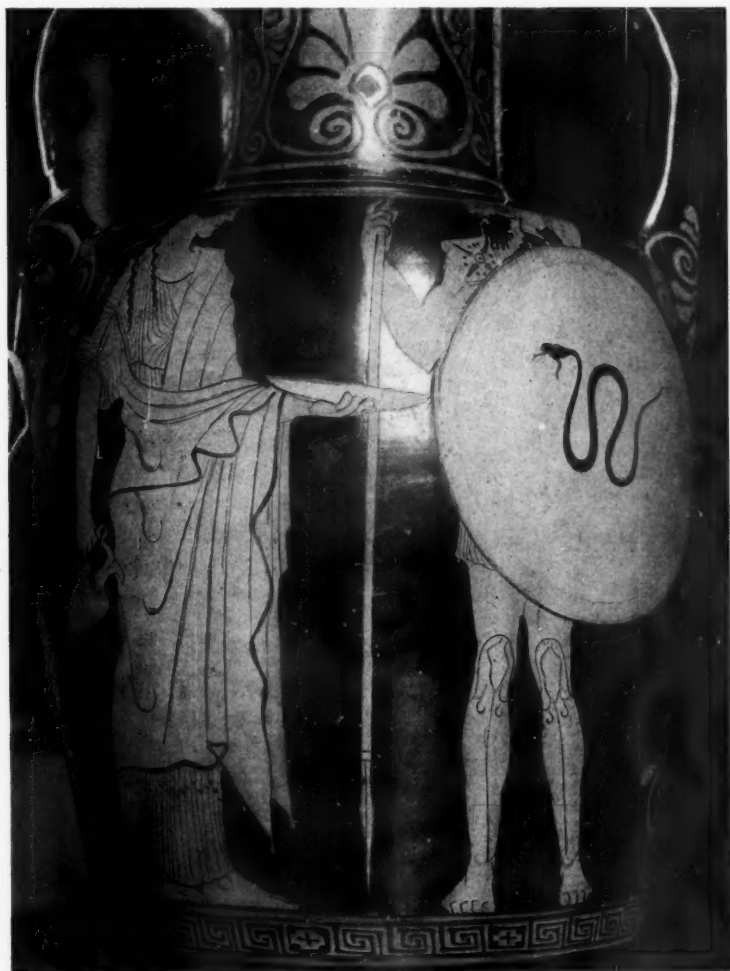


FIG. 1. — AMPHORA IN MADRID

anywhere in Group W, unless on the reverse in Leningrad or Lancut. The greaved legs in Madrid and Boulogne are closely similar. Unless on the Leningrad vase, there is no unbroken meander running in twos, as in the signed pieces, and no meander of the type labeled  $\delta$  by Beazley, which occurs in a number of the earlier things.<sup>9</sup> In Würzburg and Madrid the meanders are of one type, which might be called  $\gamma$ ;

<sup>9</sup> *JHS*, 1914, p. 186.



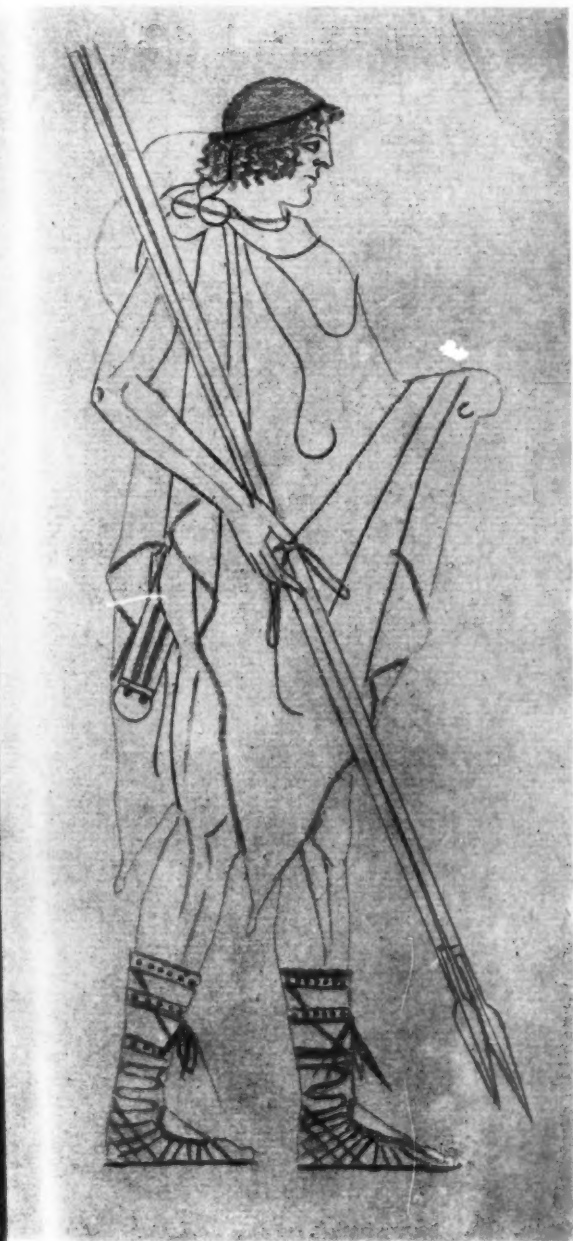


FIG. 2. — AMPHORA IN MADRID



FIG. 3. — AMPHORA IN MADRID



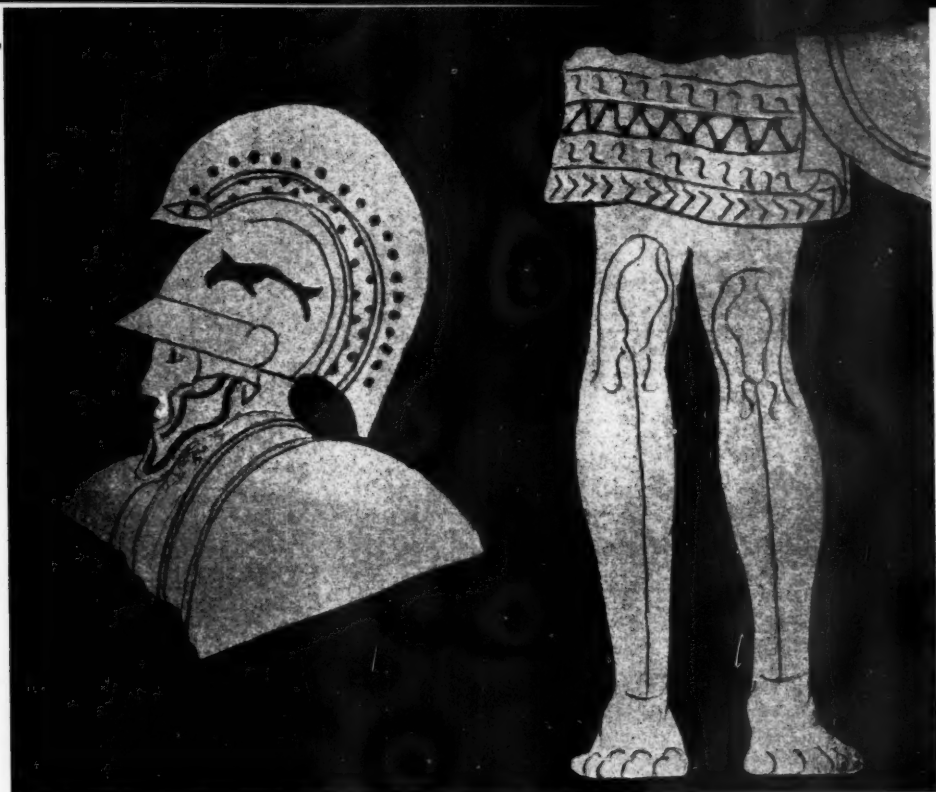


FIG. 4.—AMPHORA IN BOULOGNE



FIG. 5.—AMPHORA IN BOULOGNE



the interrupters are rectangles containing Greek crosses, and the meander does not change direction. The two examples are drawn with about the same degree of neatness and are distinctly inferior to the same pattern on the Chicago pelike, which is contemporary with the signed vases.<sup>10</sup> The Lancut meander is not very different in type, having saltires substituted for Greek crosses.

Except for the reverse in Leningrad, the figures on the five amphoras are drawn carefully, uniformly and reasonably well, but they are lifeless and dull. The order might be: Madrid, Boulogne, Lancut, Würzburg, Leningrad; but there is little development within the group.

Figures 6 and 7 illustrate a small pelike in the British Museum.<sup>11</sup> There is a herring-bone below the picture and an egg-pattern above. This combination is found in a pelike in Leningrad<sup>12</sup> (fig. 8) and in four others,<sup>13</sup> and one in Berne has the herring-bone if not the egg (fig. 9).<sup>14</sup> The pelikes in Vienna and Marseilles are small, though I cannot give the exact height, and the same is probably true of that in Berne, which I know only from the drawings. All seven appear to be closely related, and may be called Group X.

The Ionic himation does not appear; there is one peplos, ungirt, in a picture (Beazley no. 33), which is almost a replica of that on the Würzburg amphora of Group W. Four long chitons are drawn in the "Stieglitz" manner (figs. 6 and 8), only one "regular." Broad brown lines are used for the edges of garments in Leningrad, Vienna, and in both British Museum pelikes; in Berne to about the same extent as in the Würzburg amphora. Hooked lines in outer garments are scarce, though not entirely lacking. Frontal feet occur in Vienna and Marseilles and the toes are drawn with wide arcs open at the sides; the arcs are more regular than in Group W, but this results from the smaller scale and the scheme is essentially the same. Ankles are usually drawn in two marks; that the shorter one is occasionally lacking, as in Vienna, Leningrad and Berne, is probably without significance in such rough pieces. I do not think that an outspread hand occurs at all in the group, though in the Louvre pelike is a hand that could very well have been so drawn. Thyrsoi, which are not present in Group W, occur in two of these vases (figs. 6-8), and are quite unlike the thyrsos in the earlier work of Hermonax.

As arranged in Beazley's list, these pelikes make a descending series, but the range is not great in size, style, or quality. The group is related to Group W by the frontal foot and other features already noted; compare also the grasping hand in figure 7 with that on the Lancut amphora.

Figures 10-11 show another undistinguished pelike, though it is larger than those in Group X;<sup>15</sup> let us assign it, with its companions, to Group Y. Above the picture is a laurel band; and below it a meander, with saltire squares in the middle and no change of direction. This combination is found also in a misshapen pelike in Brus-

<sup>10</sup> *Classical Studies* . . . *Oldfather*, pp. 73-81.

<sup>11</sup> E 371; Beazley no. 31. Good condition. Ht. 0.251.

<sup>12</sup> Beazley no. 32; museum no. 727, Stephani 1455. Ht. 0.21 (Hoppin).

<sup>13</sup> Vienna 1095, Beazley no. 35. Louvre G 546, Beazley no. 37; *CVA*. III I d, pl. 45, nos. 8-9; ht. 0.20. British Museum E 405, Beazley no. 33; *FR*. II, p. 242; ht. 0.238. Marseilles 1630, Beazley no. 34.

<sup>14</sup> Berne 26454, Beazley no. 36.

<sup>15</sup> British Museum E 374, Beazley no. 27. Ht. 0.325.



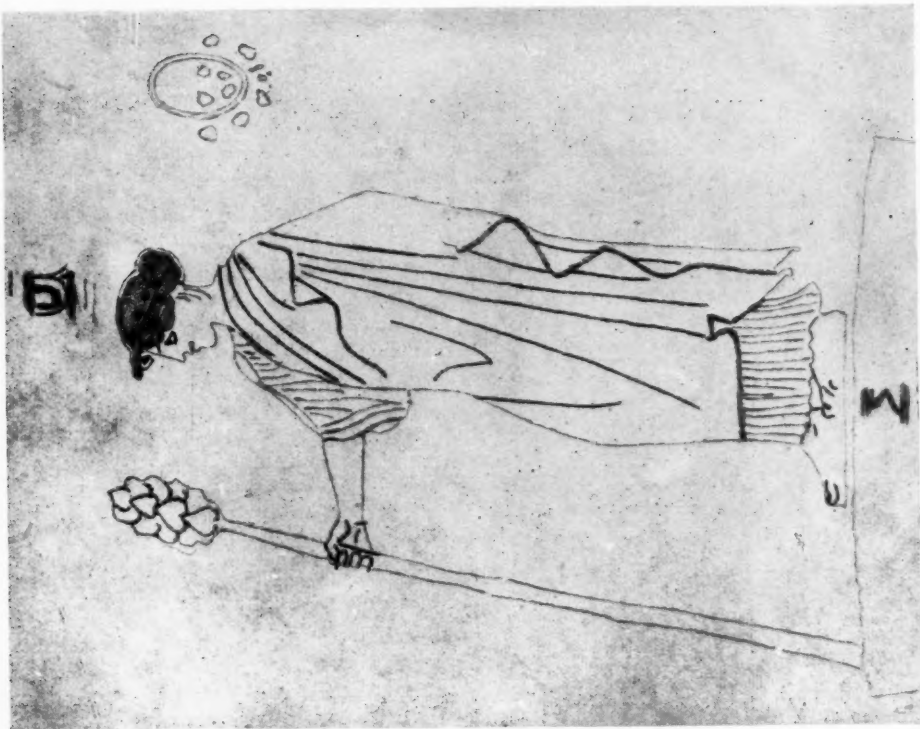


FIG. 7.—PELIKE IN BRITISH MUSEUM



FIG. 6.—PELIKE IN BRITISH MUSEUM





FIG. 8.—PELIKE IN LENINGRAD

sels.<sup>16</sup> In a quite small one in the Brooks collection at Tarporley<sup>17</sup> (fig. 12) the saltires are replaced by Greek crosses, which results in a  $\gamma$  meander. The drawing of the overfall of the peplos puts the Brooks and Brussels vases together, and it is probable that the third piece goes with them. Frontal feet, present in the London vase, are drawn in the Würzburg manner; indeed the entire figure of the boy enveloped in the mantle is very like the corresponding Würzburg figure. The

<sup>16</sup> Beazley no. 28; *CVA*. III I d, pl. 9, no. 2. Ht. 0.295.

<sup>17</sup> Beazley no. 29. Ht. 0.21.



FIG. 9.—PELIKE IN BERNE



FIG. 12.—PELIKE IN BROOKS COLLECTION



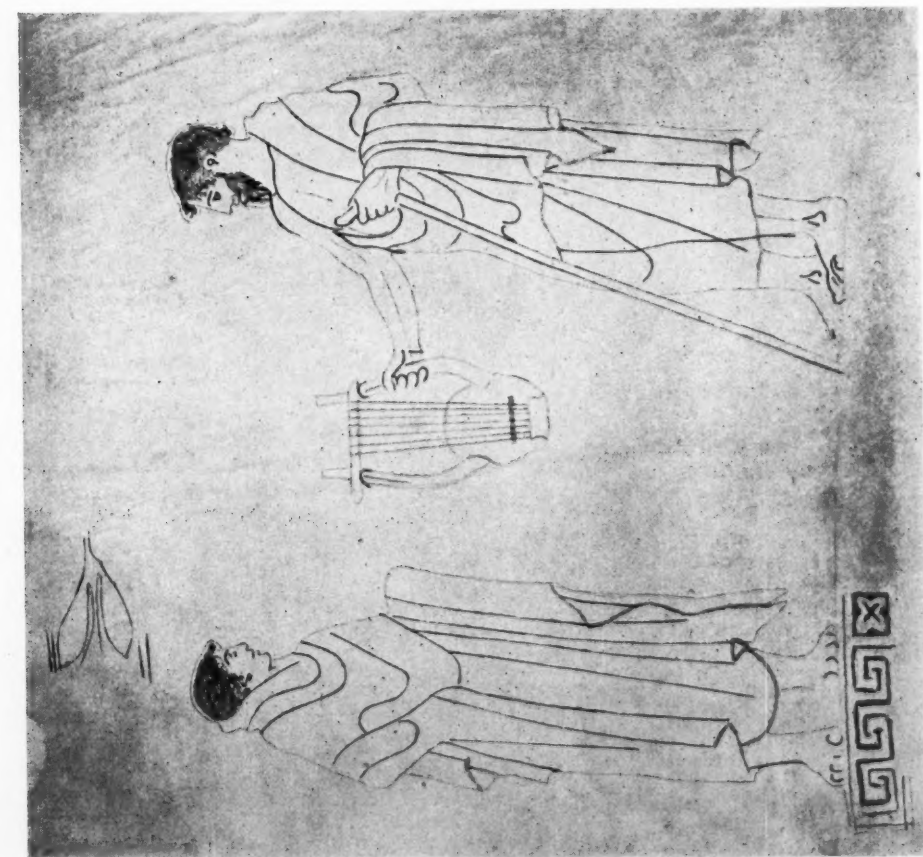


FIG. 10. — PELIKE IN BRITISH MUSEUM

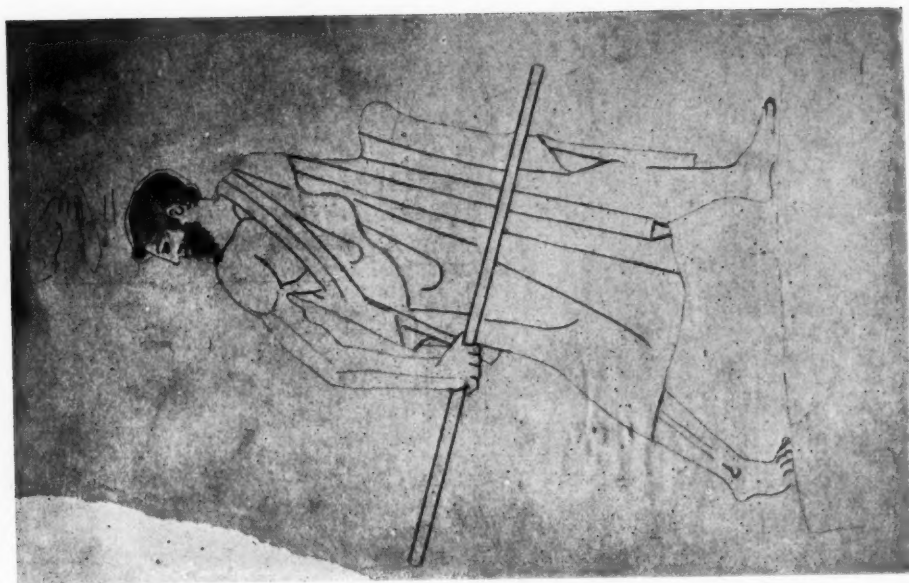


FIG. 11. — PELIKE IN BRITISH MUSEUM



mantles and grasping hands join the former vase also with the British Museum pelike of Group X (fig. 7). Brown lines for edges of garments occur in all three of Group Y, outspread hands in none; known ankles are drawn in two marks; there is no opportunity for thyrsos. The two peploi, with the absence of the Ionic himation, suggest a late date; but it should be noted that the peploi, open and ungirt, do not closely resemble the Würzburg peplos, or even that of British Museum E 405 in Group X. And the bottom of the Brooks peplos is drawn in the wide battlement scheme, which does not occur in W or X, though there are "battlements" in the earlier work of Hermonax.

To this Group Y must be reckoned also a hydria in Rhodes.<sup>18</sup> Above the picture is laurel, below a meander that is largely destroyed. There are no frontal feet, but the brown edges occur, and a mantled lady is very like the boy in figure 10. Another lady wears a meagerly drawn but unmistakable "Tarbell" chiton, though it is not transparent.

A small amphora in Altenburg (figs. 13-14)<sup>19</sup> has a key pattern below the picture, as have two others: one in Leningrad<sup>20</sup> (figs. 15-16) and one in Naples.<sup>21</sup> In the Altenburg vase are frontal feet as in Groups X and Y, thyrsos as in Group X, and a peplos, with brown edges, closely similar to that of the Brooks and Brussels pelikes of Group Y. Evidently it is late, and the other two go with it, constituting Group Z. There are frontal feet on the Naples vase, but I cannot say positively how they are drawn. The only chiton on any of the three (fig. 15) is of the "Tarbell" type, but not transparent. The mantle worn with it, with brown edges, is similar in drawing to the peplos in fig. 13. Like the three preceding groups, Group Z contains no Ionic himation and no outspread hand. Ankles are drawn in single marks on the Altenburg vase, while both types occur in Leningrad.

A late vase that stands largely alone, at least among those known to me, is a pelike owned by Mr. Marshall Brooks at Tarporley;<sup>22</sup> I owe thanks to him for permission to publish it (fig. 17). Professor Beazley has kindly sent information about it. "There is some repainting . . . and this includes parts of the feet of the man on B [at right in the figure]. I cannot be certain that the left foot was three-quartered. As to the toes of the right, [they] seem ancient, [drawn approximately as in the Madrid amphora], but the upper line of the great toe may be repainted. Part of the lower edge of the himation in this figure is restored, also in the left-hand woman; in the right-hand woman, the right foot and perhaps part of the left. In the woman on A, the feet, parts of the peplos, part of the right hand and of the jug; in the youth much of the feet, in the man parts of the feet. The meander touched up in places. As to the outspread hands, the line at the base of the fingers is fully preserved in the woman on B, partly preserved in the man on A. Three lines in the palm in the woman (the lower part of that on the left lost; the wrist line perhaps partly modern) and probably in the man."

The woman at left on B is like several figures in the late groups (fig. 10; also the

<sup>18</sup> Beazley no. 64; *Clara Rhodos* iv, p. 107, figs. 96-97; *CVA. Rhodes* fasc. II, III I c, pl. 5, no. 1. Ht. 0.17.

<sup>19</sup> Beazley no. 48. For photographs and information I am indebted to the courtesy of Dr. Scheidig.

<sup>20</sup> Beazley no. 47; Stephani 1461. Ht. 0.22 (Hoppin).

<sup>21</sup> Beazley no. 46; museum no. 3098. Ht. 0.22 (Heydemann).

<sup>22</sup> Beazley no. 29. Ht. 0.332.





FIG. 13.—AMPHORA IN ALTENBURG



FIG. 14.—AMPHORA IN ALTENBURG



FIG. 15.—AMPHORA IN LENINGRAD



FIG. 16.—AMPHORA IN LENINGRAD



Würzburg amphora and the Rhodes hydria); for the woman at right compare figure 7. For the peplos figure in profile, the best analogies are not in Hermonax, but in the Achilles Painter (e.g., Pfuhl iii, fig. 522). The frontal foot and heavy edges afford further evidence, and the  $\gamma$  meander gives some confirmation; altogether there can be no doubt that the pelike belongs to the late period. By reason of its size, the number of figures and the relatively rich palmette pattern, it is a more ambitious production than any of the others except Group W. The drawing appears to have more life than in any of the others, and the ornamental patterns are neater.



FIG. 17.—PELIKE IN BROOKS COLLECTION

And the outspread hand, conspicuous in Hermonax's earlier work, but absent from the late pieces previously mentioned, occurs twice in this pelike, drawn exactly as in the signed vases.

There is one other important vase, the Aegina stamnos in the Vatican, that could be considered here; its position seems similar to that of the Brooks pelike; but perhaps it is best discussed elsewhere, with the earlier stamnoi of Hermonax. Two rough oinochoes of differing form would belong to the late period, but call for no remark.<sup>23</sup>

It is likely that, among the vases ascribed to Hermonax that are quite unknown to me, there are some that belong with those mentioned here; and the total number

<sup>23</sup> Beazley nos. 69 (Louvre G 573) and 75 (Altenburg 297). In the latter, the reasons for the attribution are not obvious.



of the late pieces can hardly be below a quarter of Hermonax's known works. It is probable *a priori* that a period of several years is represented, probably a decade or more. But it was a period of stagnation, when the painter's enterprise had burned out, and it is not easy to arrange the vases within the period. The amphoras of Group W certainly represent Hermonax's last attempt to produce anything notable. Unquestionably those amphoræ are inferior to many pieces from his earlier periods; and it may be natural to regard the cheap vases of Groups X, Y, and Z as products of a further decline and consequently as later than Group W; but it is difficult to compare careful drawings with careless ones. On the other hand, it might be argued that the various formulas in drawing of chitons, which were a specialty of Hermonax in his good days, appear more in the small vases than in Group W, and indicate an earlier date for the former; but this, too, is of doubtful validity, for the formulas were out of date when these vases were painted, and were probably retained in the cheap vases because they required the drawing of fewer lines than the "regular" style. Perhaps the most definite indication is found in the peploi of Groups Y and Z, which do look earlier than that in the Würzburg amphora. It will be recalled that this is not true of the single peplos in Group X, which is in a picture apparently imitated from the Würzburg amphora; and Group X does seem likely to represent the final decline of a once able vase-painter.

THE UNIVERSITY OF CHICAGO

FRANKLIN P. JOHNSON



## BONN OR COLMAR PAINTER (?)

ARCHAEOLOGISTS playing the fascinating modern game of identifying the lost works of anonymous vase-painters of Greek times frequently have to make important decisions on the basis of very meager evidence. Many a vase has been attributed when it was known only from very old photographs, unaccompanied by annotations as to restorations. In such a case, the reappearance of the vase should be made the occasion for a review of all that has been said about it.

Just such a vase is the red-figured kylix which has recently been acquired by the Walters Art Gallery.<sup>1</sup> It was once in the Somzée Collection in Brussels, and was illustrated by Furtwängler in his catalogue of that collection in 1897, on a photograph together with a great many other vases.<sup>2</sup> The identical photograph was republished in the sale catalogue of the Somzée Collection in 1901.<sup>3</sup> The vase was auctioned again in 1940 from the Stonborough Collection in New York, but was not illustrated in the catalogue published at that time.<sup>4</sup>

Working from the single and very inadequate illustration, Mr. Beazley assigned the vase to a position intermediate between the Bonn Painter and the Colmar Painter. He suggested that the Bonn and Colmar Painters might be the same person, with the vases previously assigned to the Bonn Painter really the early products of the single career.<sup>5</sup> He further remarked that this kylix is very close to, or even by the same hand as, the interior of a kylix attributed to the Colmar Painter.<sup>6</sup> The latter kylix is very fragmentary and is scattered among at least five museums. It is impossible for me to assemble photographs of all these fragments of the Colmar Painter's creation at the present time, but the more complete work formerly in the Somzée Collection is illustrated here in the hope that a decision regarding the possible identity of the Bonn and Colmar Painters may be forthcoming.

The kylix has a bowl twelve inches and a half (.315 m.) in diameter. A few portions of the bowl are missing, and there are several mended cracks. The handles belong to the vase, but have been repaired. They are neither equal in size nor identical in shape. The foot is antique, but does not fit the vase. It has a slanting edge, reserved in red, and its stem is tall and diminishes consistently up to its juncture with the bowl. Such a base belongs to a kylix of the Little Master type, or one of the transitional technique between black-figured and red-figured, or, possibly, to a large kantharos.<sup>7</sup> The original foot of our kylix probably spread out toward the top and blended into the bowl without any decided angle of demarcation.

There is no decoration on the outside of the vase. The interest centers in the single picture within. In a circle four and five-eighths inches (.123 m.) in diameter, bounded

<sup>1</sup> Walters Art Gallery, no. 48.1920. Purchased, 1945.

<sup>2</sup> Furtwängler, *Collection Somzée (Sammlung Somzée)*, Munich, 1897, pl. xxxvii, row 3, no. 2.

<sup>3</sup> *Vente Somzée*, Brussels, 20-25 May, 1901, pl. 1, 36.

<sup>4</sup> Parke-Bernet Galleries, Inc., *Sale Catalogue* number 212, October 18, 1940, p. 13, no. 81.

<sup>5</sup> *Attic Red-Figure Vase-Painters*, p. 226, unnumbered. Cf. preceding page.

<sup>6</sup> *Ibid.*, p. 226, Colmar Painter, no. 1; *JHS*, li, 1931, p. 46, no. 23; *Campana Fragments in Florence*, p. 18, no. 22 (pl. 11).

<sup>7</sup> Richter, *Shapes and Names of Athenian Vases*, figs. 155, 160, 167.



by a single red line, is a running hoplite, carrying his shield and spear and wearing a helmet, turning his back toward the spectator and looking over his shoulder. A most striking part of the design is the shield emblem, a horse of which only the hind part is visible. In the field is  $\text{HO } \Gamma\text{AI}\zeta \text{ KAVO}\zeta$ , in red paint.

The general plan of the picture was clear in the old illustration. Since the vase was acquired by the Walters Art Gallery it has been cleaned and slightly retouched. Some details which could not be seen in the old photograph are obvious in our figure 1.

The only sizable missing portion is a piece at the right of the picture, about one inch in height, averaging about one-eighth of an inch in breadth but widening toward the top. This piece comprised part of the right knee, the black area immediately above the knee, a fraction of the spear, and a tiny bit of the right arm. This area has been restored, with boundaries of leg, arm and spear indicated. The old restoration allowed the tip of the helmet crest to appear in this area. Since no portion of the actual tip remains and since there is no proof that the crest extended beyond the arm, this part of the crest has been omitted.

A long crack through the left side of the picture cuts the left thigh, the left shoulder and the shield, the nose and the front of the helmet. This crack was formerly concealed for considerable distances. Some chipping has taken place on the surface at the left of the crack in its upper part. In the old restoration an eyelid was painted over the chipped area, and the eye was thereby foreshortened in a way which would have been inconceivable in early Greece.<sup>8</sup> The Greek draughtsman drew the eye with the inner corner closed, and all the upper lid which he drew is actually preserved, but the upper line is so near to the crack that it is difficult to distinguish. Chipping beside the same crack at a slightly lower level has made the nose too long and somewhat uneven on the end.

Because of certain damage which had occurred, namely a crack across the body at waist height, a small pit on the left shoulder, and another small pit on the right hip, the central part of the figure had been smeared with a reddish pigment and repainted with black lines, and it was feared that all the internal markings might vanish in the cleaning. However, all the important lines have actually reappeared. A few of them are worn. The relief lines outlining the buttocks with the little fork at the top are perfectly preserved. The shoulder blades were bounded by continuous lines from top to sides. Only one small piece of the left shoulder blade has had to be restored. The spinal column is indicated by a straight vertical line in the center of the body; this line is indistinct, and may have been done in slightly dilute glaze. The area below the spinal column is damaged, but it is clear that the column never was connected with the buttocks. A diagonal line which ran toward the front of the figure from just below the spinal column all but disappeared in the cleaning. It is possible that there was originally such a line in dilute glaze. A horizontal line along the upper part of the right thigh is preserved for a short distance only. There is a good relief line outlining the bulge of the left calf, and a relief line to indicate the outside of the right ankle and shin bones.

<sup>8</sup> See Reichhold, *Skizzenbuch griechischer Meister*, p. 60, fig. 11, for typical Greek drawings of the eye. The eye of our figure approximates Reichhold's 3, 4 and 5. The restorer made it like his no. 6.





FIG. 1.—INTERIOR OF RED-FIGURED KYLIX IN BALTIMORE



It remains to add that the figure is bounded everywhere by a heavy contour line, and, except around the hair, by a very fine relief line. In addition to the lines which we mentioned as possibly in dilute glaze, there are two short wavy lines in dilute glaze on the right shoulder. There are also colorless depressed lines of the type which are usually classed as preliminary, rendering with considerable accuracy details which were omitted from the relief drawing: the lower or hind part of the right thigh and the details of both feet.

We may observe that the undecorated exterior of the vase is an exception to the schemes of both the Bonn and Colmar Painters, but quite usual with some slightly earlier painters, for example with some who worked in the studio of Chachrylion. This fact suggests that we are dealing with one of the earliest works of a school.

It was remarked by Miss Richter that on works by the Colmar Painter, anatomical details were usually confined to dilute glaze markings in the area between chest and hip.<sup>9</sup> This is strikingly not the case with our vase. I know of no statement about the characteristics of the Bonn Painter's works, but my own observation is that they usually do not show relief lines on the legs. However, a kylix which Mr. Beazley described as like the Bonn Painter's, has legs drawn with considerable detail.<sup>10</sup> Possibly, relief lines on the legs indicate early date.

The most striking part of the drawing is the detailed treatment of the back. Interest in back views is shared by the Colmar and Bonn Painters with a few contemporaries and predecessors. The complete shoulder blades, as drawn on this vase, are almost unique, and that is why it was important to establish the fact that they were original. Most Greek vases interrupt the shoulder blades in the middle, or omit the upper or lower part. In general, the shoulder blades on vases attributed to the Bonn Painter are rather more complete than on those which have been assigned to the Colmar Painter. Fairly complete pairs occur on the outside of the kylix in Bonn from which the Bonn Painter received his name.<sup>11</sup> In the same scene are several examples of that little fork at the base of the spine which is so striking on the Baltimore kylix. However, on the vase in Bonn the spinal column extends close to the fork, while on ours it is quite disconnected from it. On the Colmar Painter's works the fork may be omitted, but the spinal column always aims in the right direction.

The Baltimore vase, now that it has been cleaned, proves, then, to have similarity to both Bonn and Colmar Painters, but rather more with the former. It seems to be of early date as regards them both. It would be possible to consider all these vases as works of one man, with our kylix one of his first attempts. This painter would begin with the simple decorative scheme of one internal picture, then undertake the three-picture scheme. He would begin by being interested in all details, but later omit the internal markings of the extremities as unnecessary. He would maintain throughout an interest in drawing the back view, but modify his scheme of drawing. First he would make the shoulder blade complete, as was correct, but later take to making it sketchy and incomplete, since this was prettier. The buttocks he always outlined clearly, but the little fork at the top, used in the earlier works, was apt to be

<sup>9</sup> Richter and Hall, *Red-Figured Athenian Vases* i, p. 58, no. 36.

<sup>10</sup> *Attic Red-Figure Vase-Painters*, p. 225, unnumbered; *JdI*. xi, 1896, p. 184, fig. 24.

<sup>11</sup> *CVA Bonn*, pl. 2, nos. 1, 2.



omitted later on. The spinal column, first appearing as a detached central division of the body, he would learn to handle more logically, indicating its connection with the legs. The whole tendency of this painter would be in the direction of simplified representation and away from literal detail.

Such a reconstruction of the life of one painter instead of a Bonn and a Colmar Painter is possible but not, in my opinion, obligatory. I am therefore offering this material to the world for a decision.

THE WALTERS ART GALLERY

DOROTHY KENT HILL



## A NEW PELIKE BY THE GERAS PAINTER

GIFTED with a strong feeling for the incongruous, the Geras Painter is an eccentric who stands apart from the other minor artists of his time. Although he specialized in painting pelikai, the product is no mere string of factory pieces. His canny rusticity, displayed in a variety of refreshing subjects, gives to his best vase-paintings something of the flavor of a good practical joke. For the list of his known works, which has grown steadily over the years, we are thus far indebted solely to the attributions of Professor Beazley.<sup>1</sup> The introduction of a newly salvaged pelike, decorated by the Geras Painter in an agreeably pawky mood, may afford some entertainment for his discoverer's birthday festival and will perhaps be received with indulgence as a respectful greeting from one of the small fry. At least the pictures on the vase, with their promise of well-stocked revelry, can be counted upon to add their note of cheer to the occasion.

The little pelike illustrated in figs. 1-4 was recently put together from fragments in the University of California Museum of Anthropology at Berkeley.<sup>2</sup> One handle, parts of the ornament at each handle, and some other portions of the vase are lost, but fortunately the decorated areas are nearly complete. Apart from the cracks and the gaps, which can be seen in the illustrations, the surface is in good condition.<sup>3</sup>

The main side (fig. 1) shows two satyrs engaged in some kind of culinary preparations, to which we shall return later. At the left, a boy-satyr<sup>4</sup> bends forward to right, his knees on the ground, his buttocks resting on his heels. His arms are stretched out together, and both hands are immersed in a large shallow basin tilted upward so that the near side rests on his thighs, the far side on the ground. He seems deeply absorbed in his task, as if mindful of future rewards. He is beardless, but wholly bald,<sup>5</sup> and wears a red fillet which has an upward projection over his brow.<sup>6</sup> At his right, an adult satyr advances to left, bent forward. This figure is bearded,

<sup>1</sup> *VA.* pp. 56-7; *AV.* pp. 109-10 and 470; *ARV.* pp. 174-6 and 954. In this paper, the abbreviations used in citing certain of Beazley's works follow the system used in *ARV.* ("Attic Red-Figure Vase-Painters"). The author's name is omitted in the references to *ARV.*, and the vases listed in it are mentioned simply by painter and number, or page and number, in that book.

<sup>2</sup> UCMA. No. 8/4583, of unknown provenience. Gift of Mrs. Phoebe Apperson Hearst. Ht. 0.200; max. body diam. 0.150; diam. at lip 0.113; diam. at neck 0.084; diam. of footring 0.115; width including handles (estimated) 0.165. I am thankful to Professor H. R. W. Smith for the suggestion that I publish this vase, and for favors extended while the study was in progress.

<sup>3</sup> A small piece is pitted out of the boy-satyr's chest, and there is a circular flattened area covering part of his back. The glaze is lustrous, but partly mottled, and overfired to a brownish color in a large spot to the right of the reverse picture. The clay is orange-tan, with some traces of ruddle.

<sup>4</sup> This boy-satyr is one of about a dozen examples on vases which are dated before the middle of the fifth century (cf. Brommer, *Satyroi*, pp. 24 and 27, and 56 f. note 24; Beazley, *VA.* p. 57; Nicole, *DS.* 4:2, p. 1100, s.v. *Satyri*).

<sup>5</sup> His baldness, as a misapplied attribute of maturity, may be compared with the partial baldness (and full beard) of the satyriskos on a r.-f. column krater, Tillyard, *Hope Vases*, pl. 21, 130 (cf. Brommer, *Satyroi*, p. 57).

<sup>6</sup> This type of fillet ("apicate") was much in evidence in the first half of the fifth century, and is found in several varieties. On its meaning, see Smith, *CVA.* Univ. of Calif., text, page 45 (with bibliography). I cannot explain the break in the boy-satyr's fillet, unless it be simply that the red paint has worn off there.





FIG. 1



FIG. 2

PELIKE IN BERKELEY BY THE GERAS PAINTER  
(Scale about 1:2)



FIG. 3.—DETAIL OF PELIKE SHOWN IN FIGS. 1-2  
(SLIGHTLY ENLARGED)



FIG. 4.—HANDLE-ORNAMENT OF PELIKE  
SHOWN IN FIGS. 1-2 (SCALE ABOUT 3:2)



and partly bald, and wears a red fillet like the boy-satyr's. Across his right ankle is a single horizontal line, probably meant for an anklet.<sup>7</sup> He carries a situla in his left hand, and is about to pour something into the basin from a wide-mouthed oinochoe<sup>8</sup> which he holds in his right hand. Evidently he must be sure to get just the right amount. Above the young satyr, there is a sort of shelf or bracket, supporting a large, lidded crock (detail, fig. 3). The two vertical lines in the crock's lip-zone could be intended for a handle, but they may be there simply for decoration. Part of the bracket's vertical arm is covered by a round (seemingly accidental) blob of black. Above the adult satyr, a wine-skin hangs on the wall.

On the other side of the vase (fig. 2), a satyr, bearded but not bald, runs to right, looking backward to the left. He carries in his right hand a situla like that on the obverse, and balances with his left hand a large pointed amphora resting across his back. There is a horizontal line on his left ankle, as on the other satyr's right ankle, and a red fillet on his head (no upward projection in front).

The figures on both sides of the vase have an unfinished look, as if the painter had left this piece without adding the final touches. The pourer's neck is badly distinguished, and there is no detail in his ear; the boy's ear is also slighted. The head of the runner is even more roughly sketched. The contour of his right shoulder confusingly matches the level of his mustache, so that the fine simian effect of his protruding lips is partly lost; the indentation in the bridge of the nose is merely a straight black line; and his ear is completely lacking in interior details. On neither side is there any indication of fingers on the hand holding the situla. Yet with all these signs of haste the style is vigorous and sure-handed. The supple poses and intent expressions of the two main figures are especially vivid. The reverse figure is more old-fashioned, but he is convincingly brisk.

In all three figures there are heavy preliminary sketching impressions, some of which may appear in the illustrations. The few anatomical details are rendered in relief lines. Some of them are not very high or sharp, but there are no true wash lines in the drawing. The only relief lines used in the contours are in the outline of the amphora between the runner's left hand and shoulder, and in a small part of the lower side of the pourer's left arm.

The under side of the foot and the lower part of the foot-ring are reserved, as is usual for late archaic pelikai. There is also a reserved band just inside the lip, and a small reserved patch under the arch of the handle. The rest of the vase is black, inside and outside, except for its decoration. Enough of the handle-ornament remains to show what it was like: a pair of palmettes separated by "s"-spirals. Figure 4

<sup>7</sup> Though often encountered, this line is almost as often ignored in the descriptions of figures which have it. There is reason for doubting that it always signifies an anklet (see Richter and Hall, *RFVases* i, p. 47). In several examples by the Geras Painter, who has a special liking for this motive, the line seems not to extend all the way across the ankle (e.g., in Nos. 1A, 4A, and 14B, the last being the New York pelike discussed by Richter, *loc. cit.*). But there has been no other explanation of it. See Pierre Paris, *DS.* 4:1, pp. 396-7, s.v. *periscelis*, for examples and literature (especially Hartwig, *Meister-schulen*, p. 235).

<sup>8</sup> The form is not unlike that of Oinochoe Shape 4 (*ARV.*, page ix). According to Beazley, this type lasts ca. 470-400 B.C. (*V.Pol.* p. 32 and note 2), but ours may be a little earlier: see below, pp. 511-12. There are four notable specimens, all decorated by the Chicago Painter, in Boston (*ARV.* p. 409, 31-34).



gives what is left of it on the less mutilated side. Near the end of the frieze above the reverse picture, the egg-pattern has several "eggs" with hollow centers.

The shape and decoration of this pelike place it at once in the same general class as those already attributed to the Geras Painter.<sup>9</sup> Its form is most like that of his later pieces, which are usually short, with a relatively broad neck and mouth. The type differs markedly from the long-necked variety, with swollen body, examples of which were decorated with framed pictures by the Leningrad Painter and the Agrigento Painter, and others. The handle-ornament, while it is not distinctive, is a motive that is contemporary with—and favored by—the Geras Painter (see, for example, Nos. 1, 2, 3, 4, 11).<sup>10</sup> The "z"-pattern below the pictures, which is found in this position also on his pelike in Leipzig (No. 6), is not a very common border in red-figure, and I know of only one other instance of its being used in exactly this way.<sup>11</sup>

The subject of the main picture inevitably calls to mind the Geras Painter's knack of exploiting overlooked opportunities for dressing up homely materials by presenting them in odd mixtures. A part of the trick is to make inanimate objects dominate the scene as the main key to its implications. He is most fond of showing satyrs in new and unexpected circumstances, in which they are tamed and brought to terms with the restraining forces of civilization: clothed (Nos. 4, 16), drawing water from a well (No. 4), being punished (No. 6), helping Dionysos on with his armor (No. 10),<sup>12</sup> playing *ephedrismos* (No. 19). Our satyrs in the kitchen, with their minds fixed on the basin, fit naturally into this environment and contribute something to the wealth of its repertory.

For closer stylistic study, we should examine some of the figures shown in comparable attitudes on published vases by the Geras Painter. Especially to be noticed are the poses in which both arms are extended together, like our boy-satyr's (Nos. 4B, 9AB, 19B); shoulder and arm are seen in profile, as in both figures of the main picture (Nos. 2A, 4B, 6A, 11A); the chest is shown frontally (or nearly so), with the head in side view, as in the reverse figure (Nos. 1A, 3B, 5A, 16A, 22, 24); and full-length running or walking figures (Nos. 4A, 14B, 22). There are also some isolated details which help to characterize the style.

These comparisons reveal a complex, organic identity of style which reaches to every part of the decoration on the Berkeley pelike. (1) The arm and shoulder seen in side view have a truly distinctive form, most closely matched on the Haryard pelike (No. 4). The shoulder muscle is knotty, and the line running downward across the torso is very long and noticeably bent: the enclosed space between this line and the contour of the shoulder looks somewhat like a ham. (2) The chest, seen frontally

<sup>9</sup> On the Geras Painter's style, which has been little discussed, see Richter and Hall, *RFVases* i, p. 47; Beazley, *V.A.* pp. 56f.

<sup>10</sup> It is tighter and appreciably less developed than, for example, the ornament on the Chicago Painter's pelike in Lecce (*ARV.* p. 408, 19; *CVA.* I, III I c, pl. 4, 3).

<sup>11</sup> On a pelike by the Kleophrades Painter (*ARV.* p. 123, 27). There is a pelike in Compiègne *CVA.*, pl. 17, 11-12) which has this border *above* the pictures. A chous in the Louvre (Deubner, *Att. Feste*, pl. 13, 1-2) has it below the picture. Other examples: hydria, below picture, *CVA.* Gallatin Coll., pl. 25, 1; around medallion of kylix: Licht, *Sittengeschichte* i, p. 228 (Angular Painter: *ARV.* p. 612, 13).

<sup>12</sup> Side A is pictured (after Froehner) in *DS.* 4:2, p. 1093, fig. 6129. On the subject, cf. Brommer, *Satyroi*, 55, note 22.



with the head in profile, shows a characteristic interrelationship among its parts. The collar-bone is a wide "v," the forks of which are straight lines: the tips are not hooked, but meet in an angle with the upper end of the vertical line for the sternum. The chest is usually shown as not fully frontal, but slightly twisted, with suitable changes of detail to fit differences of position. Relative distances from full-front are shown by deepening the curve of the line for the breast as that side recedes from the frontal plane. (3) The Geras Painter gives his figures arms and legs that are usually very slender for the size of the body: in one or two extreme cases it almost looks as if the withered limbs of Old Age (No. 11) had been carried over by habit. He suggests muscularity in the upper arm simply by pinching it in at its ends, chiefly at the shoulder. Where there is a black background, the painter actually digs into the armpit and the shoulder, as on the right arm of our pourer, and on the left arm of the runner (compare especially Nos. 5A, 16A). (4) This painter's heads are notable for their pointed, sharply uptilted noses (on both human beings and satyrs). The nostril, when shown, is set rather far back into the cheek, and is drawn as a deeply curved line having its open end at the top, as on the boy-satyr. In satyrs the narrow but deep indentation in the bridge of the nose is also typical. Mouth and mustache are turned down sharply at the corners, often running together at their ends. The eye and eyebrow are set at right angles to the profile, or are slanted downward, and the eyebrow is strongly arched. The mass of the hair, with its droopy puff over the brow, tends to look like a wig. Necks are usually very short and thick, and are often obscured by the position of the head. (5) The boy-satyr's head may be compared with the heads of the boys on the pelike (No. 2A) and the hydria (No. 24) in Athens. The heavy chins and the turned-down mouths in particular are to be noted. (6) The feet are usually very short, and thick through the instep. On the pelike in New York (No. 14), both the feet of the satyr have the big toe completely cut off by a thick dividing line, as in our pourer. The line across one ankle of each of our adult satyrs—whatever it is for—is found so often on the Geras Painter's figures that it seems almost a mannerism.<sup>13</sup> (7) The pubic hair above the genitals of the running satyr is curiously indicated by a small black dot adorned with two tiny whiskers. A similar peculiarity of treatment may be observed also on the Geras Painter's pelike in Leipzig (No. 6) and the fragment from the Acropolis (No. 22). (8) Some of the contours on our pelike have the appearance of a row of concave arcs, separated by little pointed ridges. This effect is seen most clearly in the right edge of the situla on the reverse, and the right side of the shelf's upright in the main picture. Does it reveal an individual kind of brushwork used while blacking in the background, exhibited again on the left buttock of the pick-a-back rider on the Geras Painter's neck-amphora in Copenhagen (No. 19)?

So the paintings on our pelike were done by the Geras Painter. At the possible risk of being tedious, I have ticked off the main reasons for this attribution, hoping that their enumeration might serve for the present as a very rough characterization of the painter's figure style. The pelike's shape and accessory ornament, as well as certain indications in the drawing (especially the treatment of the eyes), suggest that it is fairly late among his works. More than this I am not prepared to certify.

<sup>13</sup> See above, note 7. Geras Painter, Nos. 1, 2, 3, 4, 6, 14, 19, 22, and 23 all have it.



Let us say that it seems to have been painted near the time of transition from the ripe archaic to the early classical style.

Besides presenting a unique and partly obscure subject, the artist has also enriched his work with some details which are so rare that they call for special notice. These are the shelf supporting the large crock, and the situlas carried by the adult satyrs.

Fifth-century Greek houses must have been remarkably barren of shelves.<sup>14</sup> The vase-paintings indicate that the walls were often littered with objects of all sorts hanging from pegs or hooks, but I have observed only two examples of an actual shelf with something resting on it. One of these is drawn almost exactly like the shelf on our pelike. It appears on a kylix by the Wedding Painter, in Compiègne,<sup>15</sup> in what seems at first sight a rather surprising context. One side of the cup has an outdoor scene in which women are picking fruit. Near the left end of this picture, the shelf is shown with a plemochoe resting on it. The picture on the other side has an interior locale: a seated woman is adorning herself, aided by four attendants. Evidently the shelf and its plemochoe belong here, but the artist allowed himself the license of putting it with the fruit-pickers, along with a hanging alabastron which appears in the same picture. The second example is also a real shelf, but it is drawn in a purely frontal view, in the arming scene on a Niobidean bell krater in Chicago.<sup>16</sup> On it is a pair of greaves, which are likewise shown frontally.

Somewhat like a shelf, too, are the shoemakers' tool racks appearing on black-figured vases in Oxford<sup>17</sup> and Boston.<sup>18</sup> These racks, however, have a specialized use, and could hardly be classed as regular household equipment. There is one other fairly common architectural feature, met with on ripe archaic and early classical cups, which has some likeness to a shelf, but it proves to have a different form and use. This is the rectangular hook, shaped like an inverted *pi*, on which helmets are sometimes seen hanging.<sup>19</sup> It is always shown in side view and, without the helmet, it might be taken for a shelf.<sup>20</sup> But from the way in which the helmets are hung over

<sup>14</sup> Their purpose seems to have been served instead by chests, cabinets and cupboards (κυλινεῖα, πύγματα), etc. Cf., for example, Robinson and Graham, *Olynthus* viii, "The Hellenic House," p. 197 f., where cupboards are discussed.

<sup>15</sup> *ARV.* p. 605, 1; *CVA.* Compiègne, pl. 17, 9.

<sup>16</sup> Webster, *Niobidemaler*, pl. 19, a (*ARV.* p. 425, 9, "Manner of the Niobid Painter").

<sup>17</sup> *CVA.* Oxford 2, III H, pl. 8, 7-8.

<sup>18</sup> Richter, *Ancient Furniture*, fig. 32 opp. p. 30.

<sup>19</sup> Cf. Hartwig, *Meisterschalen*, p. 218 f. and note 2, where the following examples are listed: *ARV.* p. 249, 41 (Brygos Painter); p. 262 ("related to the painter of the Oxford Brygos"); p. 266, 1 (Briseis Painter); p. 570, 32 (Tarquinia Painter); p. 588, 106 (Penthesilea Painter). Add to these the skyphos in Vienna by the Brygos Painter (*ARV.* p. 253, 129); a kylix in Boston by the Foundry Painter (*ARV.* p. 264, 15); and a kylix in London by the Penthesilea Painter (*ARV.* p. 586, 60).

<sup>20</sup> We need not insist that these hooks were used only for helmets, since their form is our chief concern here. Yet this must have been their main use. The examples which support nothing are found also on cups, in much the same circle of artists as are those that have helmets on them (above, note 19). See especially Louvre G 448, by the Penthesilea Painter (*ARV.* p. 583, 5; Diepolder, pl. 21, 2), where a shield-case is not far away. Another, in Compiègne (*ARV.* p. 592, 11, "manner of the Splanchnopt Painter"; *CVA.*, pl. 18, 6), does not appear in a "military" context, but the form is the same. A third, on an unattributed kylix fragment in Eleusis (Δελτ. 9, 1924-25, p. 32, fig. 33), is in an arming scene, but both its uprights are very long, and something other than a hook may be intended (cf. Mme. Papaspyridi-Karousou, *loc. cit.*). Still another, on a cup by the Splanchnopt Painter (*ARV.* p. 962; *CVA.* Fogg Museum, pl. xv, 1), has very long arms, and no help is given by the context (cf. Chase, *ad loc.*: "U-shaped object"). Yet in spite of these variations in form and surroundings, I suspect that in all four



the free ends of these supports, it seems fairly clear that they are all hooks, shown in profile. Properly drawn, they would project at right angles to the wall, instead of running parallel to it. Our shelf is arbitrarily turned sidewise too, but it obviously must have depth as well as breadth in order to support the pot resting on it. A correct frontal view would not have the vertical arm at the side, but would probably look more like the shelf supporting the greaves on the krater in Chicago.

Situlas, too, are a rarity in Attic vase-painting, and no Attic specimens in clay have, to my knowledge, been discovered. The bail handles could hardly have been of clay, in any case. Nor would the thought of attaching handles of wire or rope have changed matters very much, since there were various common shapes conveniently at hand which were better suited to the same purpose. The East Greek type of pottery situla, with looped handles at the sides,<sup>21</sup> seems not to have been adopted in Greece proper. On the other hand, bronze situlas shaped much like the common Italian types have been found in Greece.<sup>22</sup> Hence the few examples of pail-like vessels shown in Attic vase-paintings were most probably metallic. Another kind, which looks rather like an amphora with a bail handle attached, could on occasion have been improvised from a pottery vessel, but there is reason to believe that it too was of metal.<sup>23</sup>

The uses to which both types are put, when they appear in vase-paintings, suggest not only that they were of metal but also that they were used primarily to contain water. Except for the examples shown on our pelike, pail-shaped situlas apparently are found only in well-scenes.<sup>24</sup> Assuming that they were of metal, they would of course have been readily adaptable to various uses, even if they ordinarily were used for water. But there is at least one other reason for supposing that the situlas carried by our satyrs are being used to draw and fetch water: the amphora, the askos, and the oinochoe provide amply for wine.

---

cases a helmet-hook is intended. — I cannot say whether the kylix is at all relevant which is published in *Vente 11-14 mai 1903*, p. 46, No. 130 (*ARV.* p. 957, "perhaps belongs to the group of the Briseis Painter"). It has beneath one handle a large *pi* (our bracket, inverted), and an "O" beneath the other: "Les deux sujets sont séparés par deux grandes lettres ΓΟ," as the catalogue has it.

<sup>21</sup> E.g., Scheurleer, *Grieksche Ceramiek*, pl. VII, 22.

<sup>22</sup> Cf. Lucy T. Shoe, *Hesperia* i, 1932, 57 f., and examples there cited; A. Grenier, *DS.* 4:2, pp. 1357-60, s.v. *Situla*.

<sup>23</sup> It is called variously by modern writers a "situla," "hot-water pail," "bucket," "amphora." It appears most often in well-scenes, such as those illustrated and discussed by Philippart, *RA.* 1933, i, pp. 154-60, figs. 1-5. See *CVA.* Univ. of Calif. 1, pl. 37, 1 (bath—and well?); Gerhard, *AV.*, pl. 277 (Codrus Painter: *ARV.* p. 740, 14; bath, and well); and the jug-shaped vessel, *DS.* 4:1, p. 781, fig. 5895 (bath, and well); v. Mercklin, *RM.* 38-39, 1923-24, p. 85 f., note 1; B. Dunkley, *BSA.* 36, 1935-36, p. 153 note 3. For the amphora-shape, cf. the bronze vessel *MonAnt.* 17, p. 451 fig. 321, which Orsi (*ibid.*, p. 450) dates in the first quarter of the fifth century. The examples seen in vase-paintings are thought to be of bronze also by Philippart (*loc. cit.*, p. 155) and by Mayence (*CVA.* Brussels 1, III I c, page 1, text to pl. 1, 3 and pl. 1, 4).

<sup>24</sup> The best-known example survives only in a drawing from a lost vase (Tischbein, *Hamilton Coll.* i, pl. 58), which is often reproduced in discussions of Greek bathing customs (e.g., *DS.* 1:1, p. 651, fig. 748), and which illustrates what must have been a common practice of placing the bath near a well (cf. above, note 23). Four youths are shown at a public bath, the rightmost standing on top of a well-head, and preparing to pour water into the laver from a situla (for the shape, cf. the bronze specimen, Furtwängler, *Olympia* iv, p. 139, fig. 868). He has just drawn the situla from the well with a long rope strung on a pulley, the lower half of which is shown above the youth's head. — There is a situla of



The subject of the main picture is not wholly self-explanatory, but its general drift is clear enough. The boy-satyr is evidently mixing or kneading some kind of food in his basin.<sup>25</sup> He cannot be merely washing his hands, not only because everything else in the picture reeks of something quite different, but also because the basin is tilted so far upward that his hands would hardly reach the small amount of water that could be contained in its lower end.<sup>26</sup> And how could we reconcile his earnest attitude with any boy's (to say nothing of a boy-satyr's) natural distaste for washing? His interest is understandable if he is helping to make goodies in which he expects to share.

The shape and location of the lidded crock<sup>27</sup> imply that it contains something solid, such as flour or meal of some kind. The grown-up satyr is preparing, with evident care, to pour some (or more?) liquid gradually into the basin. The boy seems to have the utensil braced against his thighs for a purpose, to help him in working a mixture of solid and liquid ingredients. If the *situla* contains water, the pourer may have dipped his *oinochoe* into it to make the measuring easier, but more probably the recipe calls for both wine and water. He could have got his wine from the skin on the wall, but not necessarily so: it may be there simply to balance the composition and to add to the vinous atmosphere. Thus the objects in the picture seem to imply that we have the essential ingredients for bread or cake: some kind of flour or meal, wine, water.

These are, then, the preparations for a feast. The satyrs in the main picture are making some delicacy to be eaten at the celebration. The other satyr is perhaps hurrying to get more wine and water, this time possibly for drinking.<sup>28</sup> With his backward glance, he must be urging the young chef and his helper to get on with their work. To judge by the apparent ease with which he carries his burden, the amphora should be empty, as we had already guessed: compare the amphora similarly carried by the youth on a vase in London by the Berlin Painter,<sup>29</sup> where the bearer's hand is

similar shape on a r.-f. column krater by the Naples Painter (*ARV*. p. 705, 15; Leroux, *Madrid*, pl. 29, 1), where the rope and pulley are also seen, and a well-house.—On the reverse of the Geras Painter's pelike No. 4 (*CVA*. Hoppin Coll., pl. 12, 4), the exact shape of the vessel is not clear, but it may be a *situla*.—I found nothing that would help much to interpret our pelike among the many "*situlas*" in Italiote vase-paintings. These have various uses, and often they look more like baskets than *situlas*.

<sup>25</sup> Basins of this type were of course put to various uses. The term *σκάφη* seems to have been applied indiscriminately to any broad, shallow vessel, whatever its use (see Dictionary). Relevant here, *Etym. M.*, p. 803: *φυστή ἡ ἐν ταῖς σκάφαις τριβομένη καὶ ἡρέμα ἀναδευσόμενη μᾶζα*. On the use of similar basins for carrying sacrificial foods, see Beazley, *CVA*. Oxford 1, text, pages 6–7; Richter and Hall, *RFVases* i, p. 49. They were also used along with baskets, for vintage (e.g., Graef-Langlotz, *Akropolisvasen* i:4, pl. 107, 2560; *Ep.* 1924, p. 106, fig. 3; *CVA*. Bib. Nat. 2, pl. 49, 3; and cf. Beazley, *loc. cit.*).

<sup>26</sup> Whenever such basins do appear in washing scenes, they are shown level, as one would expect. Cf., for example, *CVA*. Brussels 1, III I c, pl. 4, 2; Beazley, *VA*. p. 21, fig. 12 bis; *CVA*. Athens 1, III I c, pl. 3, 2.

<sup>27</sup> The shape is not found in decorated pottery, but belongs rather to the rough "kitchenware" found often in excavations. When used as a storage vessel, it would need a tightly fitting lid to keep out dust and bugs, especially weevils if it contained flour or barley meal.

<sup>28</sup> Assuming that the wine is for them, these satyrs are no doubt reconciled to the human practice of mixing water with their wine, and do not always drink it neat. This change in the mores of satyrs is implied elsewhere, in pictures which show them taking wine from kraters (e.g. Louvre G 201, Pottier iii, pl. 129).

<sup>29</sup> *ARV*. p. 133, 28; *CVA*. Brit. Mus. 3, III I c, pl. 10, 1 b.



inside the mouth of the vessel. No doubt you were expected to bring your empties when you went to the wine-shop. But it is asking too much of the painter to demand that all these details be made clear, and there is room enough for conjecture in the questions which still must be considered.

We can only guess at what is being mixed in the basin, but there are a few clues. First, no cooking stove is seen in the picture. This fact should perhaps not be taken too seriously, for there could be a stove somewhere out of sight. On the other hand, there are some kinds of unbaked cakes which were made of cereals, and the commonest of these—μαῖζα—is suitably easy to prepare.<sup>30</sup> It was usually made of barley-meal (ἄλφιτα), mixed with liquids, such as water, wine, oil, or milk, sometimes with condiments added.<sup>31</sup> It was notoriously a staple food of the lower-class Athenians,<sup>32</sup>—so much so that even they were beginning to scorn barley, ἀλεκτορίδων τροφήν καὶ οὐκ ἀνθρώπων, by the end of the fifth century.<sup>33</sup> Satyrs, when domesticated, are naturally imagined to share in the life of the lower social orders, not that of the aristocracy.<sup>34</sup> In the company of other beings, their status is distinctly menial if not servile. Even in their own private lives, they only mimic or parody the doings of their betters.<sup>35</sup> As slaves or lackeys, they could of course occasionally filch a dainty from their master's table,<sup>36</sup> but that is not at all equal to having the same thing to themselves. Μαῖζα might therefore be a proper food for satyrs to have at a banquet (if indeed they are getting this meal for their own consumption), and that is perhaps what they are making here.<sup>37</sup>

It is fashionable to think that vase-paintings with subjects like this were probably inspired by the satyric drama. A good many vase-paintings show plainly that this influence was at work, but there is danger of making exaggerated claims for it. Certain works of the Geras Painter have already become involved in this question. Brommer, who has given us the fullest and most recent study dealing with the influence of the satyr-play upon vase-paintings, lists 117 examples supposedly deriving their inspiration from that source (*Satyroi*, pp. 40–48). As Brommer himself acknowledges (pp. 42–43), the evidence is not always conclusive, and often it implies (at most) a general rather than a specific influence. The Geras Painter's pelike No. 13, in Berlin,<sup>38</sup> is admitted because the association of satyrs with wells or fountains is believed to suggest the subject's derivation from a lost satyr-play by Aeschylus,

<sup>30</sup> See especially A. Jardé, *Les Céréales dans l'antiquité grecque*, p. 123 f.; E. Saglio, *DS*, i:2, p. 1143, s.v. *cibaria*; K. Ehmann, *Lehrbuch der Griech. Antiquitäten* iii: *Privatalterthümer*, p. 192, note 13.

<sup>31</sup> Wine and oil, Thucyd. iii, 49; milk (?), Hes. *Op.* 552; wine, Hesych. s.v. οἶνον ὄσσα, and Schol. Ar. *Vesp.* 610; various recipes, Athen. iii, 82.

<sup>32</sup> Athen. iv, 84; xiv, 83. Cf. also the frequent references to μαῖζα, and to ἄλφιτα and κριθαί, in Aristophanes: *Acharn.* 732, 834; *Eq.* 55, 1166; *Eccl.* 606, 665; *Plut.* 192, 544; *Vesp.* 610; etc.

<sup>33</sup> Cf. Ar. *Vesp.* 715–18; *Pax* 449. The quoted phrase is from Posidonius, *FHG*, iii, pp. 269 f.

<sup>34</sup> On this point, and on other matters relating to satyrs, I have profited especially from reading Brommer, *Satyroi*; A. Hartmann, *RE*, 3A:1, 35–53, s.v. *Silenos und Satyros*; E. Kuhnert in Roscher, *Myth. Lex.* iv, pp. 444–531, s.v. *Satyros*; Nicole, *DS*, 4:2, pp. 1090–1102, s.v. *Satyri, Sileni*.

<sup>35</sup> See Beazley, *ABS.*, pl. 15 and page 28 (and cf. v. Lücken, *Greek Vase-Paintings*, pls. 37–38); Nicole, *op. cit.*, p. 1098; Hartwig, *Meisterschalen*, p. 59; and doubtless others.

<sup>36</sup> As on the kylix in London by the Clinic Painter (*ARV.* p. 538, 4; *FR.* pl. 47, 1).

<sup>37</sup> Μαῖζα was also served at richer feasts, but there it would be of finer quality, mixed in fancy recipes, and it would form only a small part of the meal (Athen. iv, 31; iv, 50; *al.*).

<sup>38</sup> Brommer, No. 36. A, woman at fountain; B, satyr running to fountain.



the "Amymone." Also listed is the Harvard pelike (No. 4),<sup>39</sup> first because the satyr is shown at a well, but then, too, because of the presence (on the other side) of Herakles, who is said to have been a stock character in satyr-plays.<sup>40</sup> A third pelike by the Geras Painter (No. 16)<sup>41</sup> is also mentioned, in a supplementary list of clothed satyrs, who, according to Brommer (p. 59, note 40), "gehören im weiteren Sinn auch zu den Satyrspielbildern, da die Bekleidung für sie ja erst durch das Spiel möglich wurde." Without wishing to argue this matter here, or to challenge any of the pieces admitted as "Satyrspielbilder," I cannot help feeling that this is dangerous ground, and that there are negative considerations which need a better hearing.

The Berkeley pelike would qualify by Brommer's standards as a reflection of the satyr-drama, if only by virtue of the boy-satyr's presence.<sup>42</sup> We might even go further, and say that it shows the preliminaries for a dinner of Dionysos and Herakles, as in Brommer's No. 42,<sup>43</sup> and that its subject is therefore derived from the same satyr-play, assuming that this play contained a kitchen scene in addition to the banquet proper. Certainly the Geras Painter's flair for making the most of the dramatic possibilities in mere objects tempts one to think of them as cleverly managed stage properties. Yet this kind of speculation, although it is hard to refute, loses value in direct proportion to its elasticity, and has little point where there is no real evidence to support it. In such cases it seems idle to go out of our way in search of a satyr-drama (or to speak vaguely of "the satyr-drama") as the source of inspiration. A more obvious source is already at hand, in the artistic tradition of the vase-painters themselves; or, if this explanation seems to give the artists too much credit for originality, in the popular folklore regarding satyrdom. For example, it surely would not have required an Aeschylus to give birth to the idea of connecting satyrs with water-sources, the traditional home of nymphs. So far as the subject of our pelike is concerned, it seems to go best with the reverse picture of the Geras Painter's neck-amphora in Copenhagen (No. 19)—which Brommer excludes altogether from his thesis—as the artist's own whimsical infusion of human elements into the imaginary daily life of satyrs.

Even if we disallow the influence of the satyric drama upon this pelike, there is still some doubt as to who will eat the food that is being prepared. Is this, after all, mere below-stairs drudgery incidental to some feast that will be enjoyed by lordlier beings, such as Dionysos and Herakles? The humble social position of satyrs, especially as revealed by their appearance at banquets only as servants or entertainers, is very pertinent to this question. It is strange but apparently true that satyrs are never seen actually reclining at banquets, and rarely are shown eating at all.<sup>44</sup>

<sup>39</sup> Brommer, No. 41. A, Herakles carrying two amphoras on a pole (parody of Kerkopes?—see Hoppen, text to *CVA.*, pl. 12, 3–4, and cf. Geras Painter No. 21); B, satyr at well.

<sup>40</sup> Cf. Buschor, *FR.* iii, p. 272 (cited by Brommer, p. 43).

<sup>41</sup> Cf. also Richardson, *Old Age Among the Ancient Greeks*, p. 199.

<sup>42</sup> Brommer, p. 24, and p. 56, note 24. Cf. above, note 4.

<sup>43</sup> *FR.*, pl. 47, 1 (cited above, note 36).

<sup>44</sup> Cf. *CVA.* Oxford 1, pl. 4, 4 (satyr eating grapes), and other examples given by Beazley, *ibid.*, text, p. 9; also the b.-f. cup, *CVA.* Bib. Nat. 2, pl. 49. But this could hardly be called civilized eating. Satyrs are also seen reclining on cushions (e.g., *ARV.* p. 254, 137, by the Brygos Painter; Richter and Hall, *RFVases* ii, pl. 43; *CVA.* Louvre 6, III I c, pl. 36, 7–9/12), but there they are not eating, they are making music.



Can it be that these satyrs, for all their earnest attention to their chores, are to be deprived of the fruits of their labors, like the poor, sweating slaves on the back of the staninos in Brussels by Smikros?<sup>45</sup> This is a hard judgment, which one would prefer not to give. Perhaps we can still hope that they are getting up a dinner of their own, even though they may not consume it decently at table, but somehow in their own beastly fashion.

BERKELEY, CALIFORNIA

D. A. AMYX

<sup>45</sup> *ARV.* p. 20, 1 (*CV.A.* Brussels 2, III I c. pl. 12). I have dismissed as too fanciful the thought that they might be satyr-tradesmen. It is true that, for some reason, pelikai were favored as a place to show workers and tradesmen. For satyrs at work, we might refer to *ARV.* p. 184 fin. ("satyrs as porters stacking bags"), or *ARV.* p. 882, 43 (Hartwig, *Meisterschalen* p. 59, fig. 8: satyr fishing—Brommer's No. 95), or others cited by Nicole (*DS.* 4:2, p. 1098), but none of these clearly shows satyrs as shopkeepers. Equally remote is the chance that they may be making sacrificial cakes, even though satyrs do worship on occasion. Unfortunately we are not clairvoyant, and there is no telling what these satyrs will do next.



## PROCESSION PERSONIFIED

A WORK of unusual fineness, the oinochoe in the Metropolitan Museum with ΠΟΜΠΗ in the middle between Eros and Dionysos, invites close inspection.<sup>1</sup> Questions arise, however, from an examination of its details. Not everything is immediately apparent in this delicate representation (fig. 1).

First, what is ΠΟΜΠΗ actually doing? At her side stands a splendid specimen of those baskets, "Opferkörbe," which as we well know by now, were used in sundry religious and, especially, wedding rites.<sup>2</sup> It has been suggested that she is decorating the basket.<sup>3</sup> The flaw in this explanation is that she turns away from the very article which we suppose to be the object of her attention. Yet it must be realized that the figure is not represented so as to make the action unequivocal; consequently, there is no simple explanation of it. First of all, however, we should say that she is in the act of dressing. This is how she goes about it. In order to drape herself with the (originally) pink-colored<sup>4</sup> cloak that seems her only garment,<sup>5</sup> she first threw it around her back. In the present, and of course, preliminary condition she keeps it from falling, first, by pushing one part between her knees; second, by holding one of the upper ends with her teeth. The latter is a rather realistic comment by the painter, though not quite as original as it might seem. Examples can be found in other Greek vase-paintings.<sup>6</sup> Yet this attitude demonstrates two things. The figure is represented as dressing, not undressing. With works of art one cannot always say for certain whether a figure is putting on or taking off a cloth, because much the same manipulations are required in order to achieve both—witness the discussion about the Cnidian Aphrodite.<sup>7</sup> But in the present representation the garment cannot slip down because it is firmly, even conspicuously, prevented from doing so: and why should ΠΟΜΠΗ with so much effort hold her mantle if she wanted it to fall? Further, a woman while dressing uses her teeth only when her hands are busy otherwise. The above mentioned vase-paintings show this quite clearly.<sup>8</sup>

<sup>1</sup> Inv. no. 25.190. Description and bibliography in Richter and Hall, *Red-Figured Athenian Vases in the Metropolitan Museum of Art*, no. 169, pp. 215 f., pls. 164, 177. More recent discussions: K. Schefold, *JdI*, lii, 1937, p. 60; F. Zevi, *Mem. Acad. Lincei* vi, 1938, p. 355, n. 5; *BMMA Guide* i, 1939, p. 35. I want to express my most cordial thanks to Miss G. M. A. Richter for bibliographical information and photographs, with which she kindly provided me; to Miss Ch. Alexander for her friendly assistance in examining this vase and the other one, mentioned below, Richter and Hall, *op. cit.*, no. 160.

<sup>2</sup> G. M. A. Richter, *AJA*, xxii, 1907, pp. 423 ff.; *AJA*, xxx, 1926, pp. 422 ff.; L. Deubner, *JdI*, xl, 1925, pp. 210 ff.

<sup>3</sup> L. Deubner, *Attische Feste*, p. 103.

<sup>4</sup> Richter and Hall, *Red-Fig. Athen. Vases*, p. 216.

<sup>5</sup> This appears to be one of the loose garments, himatia, which the women of the Kertscher vases wear quite frequently: see Schefold, *Kertscher Vasen*, pl. 7a, woman seated at the right; 7b, standing maenad. A similar cloak fully envelops a companion of Thetis on the pelike from Kamiros, *ibid.* pl. 17 and *FR*, pl. 172; another slips back from the shoulders of the women beneath the apple tree on the pelike, Schefold, *Kertscher Vasen*, pl. 24b.

<sup>6</sup> The pyxis, *Burlington Exhib.* 1904, *l.c.*, pl. 100, I 56a, was already quoted in Schefold, *Untersuchungen zu den Kertscher Vasen*, p. 105, n. 102. Add: Fragment of pyxis, Tübingen E. 154; J. D. Beazley, *Attic Red-Fig. Vase-Painters*, p. 537, no. 43; a similar representation, A. Baumeister, *Denkmäler* i, p. 609, fig. 668, after *Gaz. Archéol.* v, 1879, pl. 23, cf. Beazley, *op. cit.*, p. 663, no. 14.

<sup>7</sup> *Gnomon* xvi, 1935, p. 202.

<sup>8</sup> Above, n. 6. The women in all these works seem busy binding their belts. The two last named examples show women wearing the peplos; between their teeth they hold one end of the *apoptygma*.



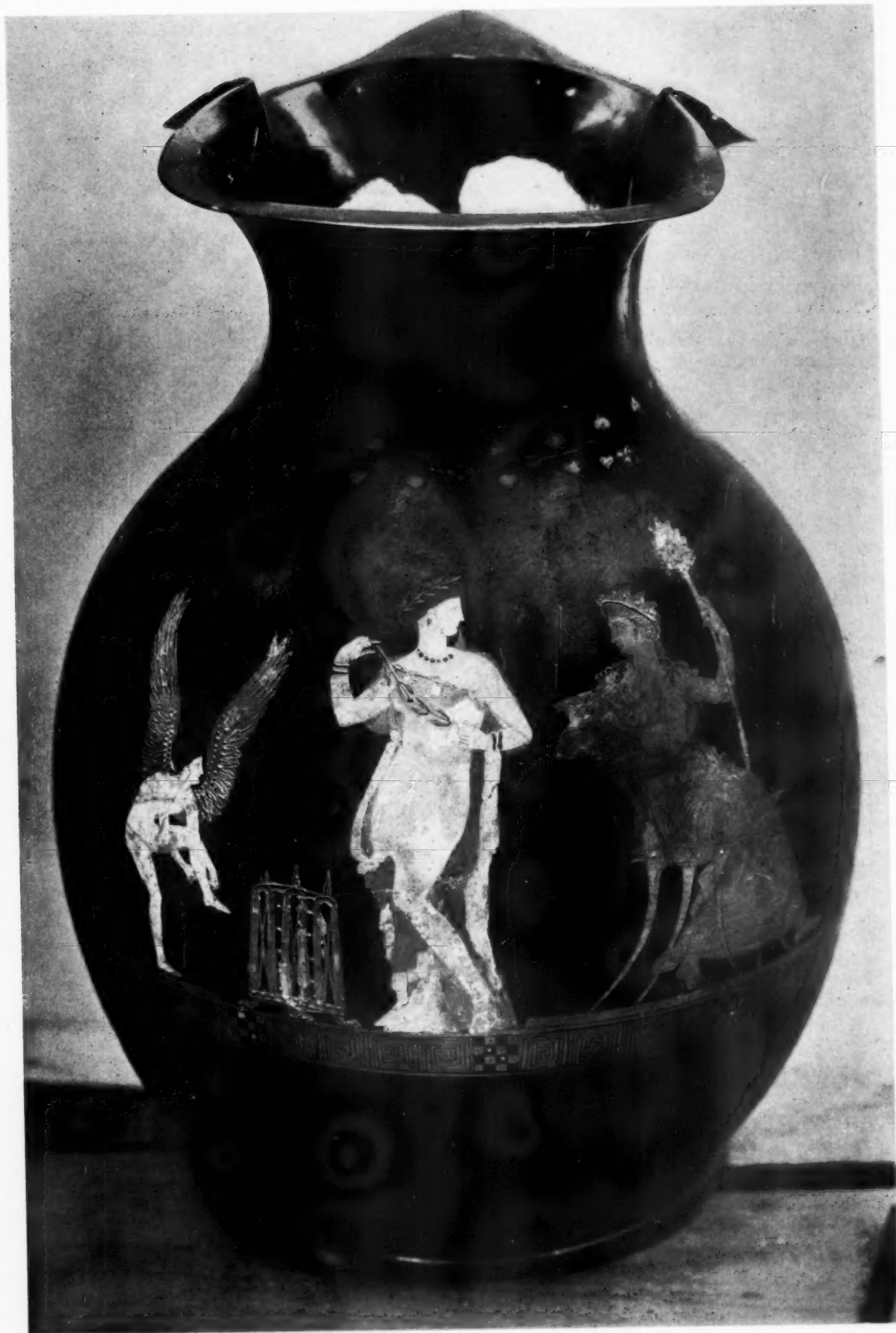


FIG. 1.—OINOCHOE IN THE METROPOLITAN MUSEUM WITH REPRESENTATION OF POMPE



Now the lady of the New York pitcher really holds something with both hands, namely, a wreath or garland of gilded leaves; two branches, the leaves of each turned against those of the other, are held together on the top by a golden globule. The fingertips of the right hand are now destroyed, but it seems likely that they, together with the gold branch, grasped another end of the cloak. Logic, as well as the preserved outlines behind the shoulder and the right arm, make this assumption likely. Without some support the cloak would not stay as it is shown in the painting; it would fall back. Consequently, ΠΟΜΠΗ here performs two actions at a time, and both seemed important to the artist so that he did not want to omit either of them. She dresses and holds the wreath. It is improbable that these occupations merely form two parts of a unified action, that is, the act of getting dressed. The possibility that the wreath, too, forms part of the lady's attire is remote. She already has a wreath on her head, and where else should such an ornament go? The figures of this style often, because of a pensive lack of determination which is proper to them, create a doubt as to their real intentions.<sup>9</sup> Evidently, in the picture before us, neither the woman nor the god to whom she turns has use for the wreath in her hands. Perhaps she really means to decorate the basket. But at the same time she clothes herself and regards Dionysos who is seated at her left side. These are incongruities, however slight. Yet they are of a kind which is not infrequent in allegorical art and, indeed, in many works they seem designed to catch our attention first. There always are two ways of responding to incongruities. Either we take the patronizing attitude of overlooking them as unessential; or we accept them at their face value as facts laid before us, and seek an adequate understanding of them.

If the latter course is pursued, another question becomes inevitable. The figure, ΠΟΜΠΗ, "procession," has been expressly designated by the painter.<sup>10</sup> It is fortunate that he did so; who would recognize her today without the explanatory inscription? The question is, why was a character representing a procession pictured the way it is shown here, as a woman dressing herself? Surely the figure must be regarded as a personification. She cannot be just a participant of the procession,<sup>11</sup> for whom the given action would be even less suitable. Yet it is clear that here one is dealing with a period when the use of personification as a means of pictorial expression was in the formative stage. Later, when a convention concerning personification was established, everything that had a name could be visualized in this manner. In late classical or mediaeval art, it is true that *nomina sunt numina* and as such picturable. In Greek art, the *numina* were there first. Many of them were originally anonymous, generic concepts of the myth-forming imagination, like the maenads and satyrs of Dionysos or the nymphs who, in works of the late fifth and fourth centuries, form the court of Aphrodite. From the ranks of these intrinsically nameless, mythical

<sup>9</sup> A comparable case: lid of a cup in Leningrad; Schefold, *Kertscher Vasen*, pl. 14a, girl leaning against a herm. "Der goldene Ölweig, den die Hände halten, soll wohl ihr eigenes Haar schmücken," *ibid.*, p. 15. This, too, may be doubted. She already wears a wreath, and there is always the possibility that she will decorate the herm beside her.

<sup>10</sup> The letters, originally white, are not recognizable in photographs but can be clearly distinguished when the original is examined closely.

<sup>11</sup> In this point I cannot concur with Schefold, *Kertscher Vasen*, p. 14. Cf. L. Deubner, *Attische Feste*, p. 103 and n. 8.



creatures, Greek art drew its earliest personifications.<sup>12</sup> There are transitional stages, however. The satyr, "Kissos," the sleeping maenad, "Tragodia," on the Oxford oinochoe,<sup>13</sup> remain satyr and maenad and behave accordingly, regardless of their names. But the case of the New York oinochoe is different. ΠΟΜΠΗ there resembles a divine appearance existing in her own right, not merely a part of some conventional, mythical or iconographical pattern. It pays to ask whether her action is not related in fact to the thing for which her name stands. Such a connection is not difficult to find. It may be described as an analogy. A woman arrays herself before making her appearance; likewise, a procession arrays itself or is arranged, before the start. In either case the spectacle promises to be a glamorous one. The personification, if so explained, refers to the preparatory state of a procession when it is about to start. Already she is literally in her boots.<sup>14</sup>

This idea was probably less surprising to the ancient than the modern observer. After all, the Parthenon frieze actually represents the same preparatory actions preceding a procession—in that case, the Panathenaic. The present composition only summarizes these preparations metaphorically, in the image of a woman clothing herself. It is interesting to compare this with the other representation of a ΠΟΜΠΗ in the Metropolitan Museum.<sup>15</sup> She appears in the retinue of Aphrodite. The rather inconspicuous figure quietly displays the necklace which she is about to don. Her attitude is commonplace and the personification, if indeed it may be so called, as yet is little detached from the impersonal types of young women who, in this style, commonly surround and symbolically multiply the charms of Aphrodite. Nevertheless, a convention of how to impersonate the idea "procession," could well be based on such representations. Indeed, it seems already in the making. Already the processional basket is placed beside the personification, like an attribute. One is not forced to understand the occupation with the necklace on this vase as an act of self-adornment, anticipating the dressing scene of the Kertsch oinochoe. Yet one may so interpret it. Moreover, in the latter the figure ΠΟΜΠΗ is at the same time shown as decorating the basket. Now a unified meaning becomes apparent in her two seemingly divergent actions. To array herself, to adorn the ritual implements, are both preparatory acts to the event hinted at. Both constitute suitable, and it seems even traditionally preferred, actions of the lady "Procession."

After this, a third question can be asked and, perhaps, answered. The procession is getting ready. Whence does it set out? Greek art as a rule is rather specific about such matters.

The answer must be sought in the bystanders which we have not so far considered. That is to say, Eros with the elegant wings to the left of the main figure, is not likely to contribute much to this question. The irregular elevation on which he stands must not be called a base; it is a terrain line. Consequently, the figure is not a

<sup>12</sup> L. Deubner in Roscher, *Lex.* 3, pp. 2114 ff., s.v. *Personifikationen*. Cf. similar evolutions in genuine mythical conceptions, like the Moirae; *RM.* li. 1936, pp. 88 ff.

<sup>13</sup> Beazley, *Attic Red-Fig. Vase-Painters*, p. 732; oinochoe, manner of the Eretria painter.

<sup>14</sup> See description, Richter and Hall, *Red-Fig. Athen. Vases*, p. 215.

<sup>15</sup> *Ibidem*, no. 160, pls. 159, 176. The legends are in very small letters, but there is no doubt about the reading ΠΟΜΠΗ above the seated young girl with the necklace. Beazley, *op. cit.*, p. 838, no. 46: manner of the Meidias painter.



statue, as is sometimes asserted.<sup>16</sup> His kind is not rare on vases of this period. In numerous compositions one can observe similar characters of secondary importance, though by no means unimportant. They might be called the significant accidentals, a pictorial device that in Greek art deserves a special study. Here it may be pointed out that Eros, natural companion of anything enjoyable, is busy putting on sandals. As he possesses wings and is not forced to walk, this preoccupation with his shoes seems a little ostentatious. The fact is the figure simply parallels and underlines the main action. He, too, gets ready.

Yet Dionysos on the opposite side plays a different rôle. His presence in this place is very interesting. The rectilinear postament on which his chair is placed, is really best explained as a statue base.<sup>17</sup> He is a statue, though we probably must not see in him the actual reproduction of a cult image.<sup>18</sup> He is rather a statue come alive.<sup>19</sup> Or the god in person has taken the place of his temple image. In each case, the point is that Dionysos is comfortably at home, as a god can only be in his own sanctuary. Undoubtedly, this is the god for whom the procession moves out. But his appearance on the elevated base also signifies a locality. And this place is not described as the end of the procession, for the condition of ΠΟΜΠΗ is hardly compatible with a state of arrival. On the contrary, the procession is in a state of preparation or, at most, departure. The reference is to a procession setting out from a temple or precinct of Dionysos.

Everything seems to indicate a specific Athenian institution. It must be doubted that this situation is equally characteristic of all Bacchic festivals in the Attic Calendar. Both the Rural and the "Great" Dionysia were celebrated with *pompae*, but the processions chiefly appear to have moved with their offerings to the sanctuaries, not away from them.<sup>20</sup> Possibly the Lenaea brought a procession through the town, but this is not certain.<sup>21</sup> Nothing recognizably connects the New York pitcher with this feast, anyhow. As to the Anthesteria, we possess considerable information, but it is contained in fragments so dispersed as to make much reconstructing inevitable. Nevertheless, we probably need not separate the Kertsch oinochoe in New York from these materials with which it has been aligned previously.<sup>22</sup> Only in the light of the interpretation here offered, a correction might become necessary.

Our picture has been tentatively brought into relation with the famous *carrus*

<sup>16</sup> Schefold, *Kertscher Vasen*, p. 14; Deubner, *Attische Feste*, p. 103, n. 5, follows him. Also, it is said that the female figure is a *Kanephoros* representing the entire procession, and distinguished from the gods because she has no base. While a *Kanephoros* might well personify a procession, the one here cannot be human. She is of the same stature as the gods, and in no way distinguished from them.

<sup>17</sup> Schefold, *op. cit.* and *Jdl.* lii, 1937, p. 60.

<sup>18</sup> The objection was correctly raised by G. M. A. Richter, in Richter and Hall, *Red.-Fig. Athen. Vases*, p. 215, n. 2.

<sup>19</sup> Similar to the statue of Artemis on the Orestes krater at Naples, who seeks to penetrate the darkness of the *adyton*, and therefore protects the eye with her right hand like a person straining her eyes; *FR.* pl. 179 and text, p. 363.

<sup>20</sup> Deubner, *op. cit.*, p. 140, about the "Great" Dionysia; *ibid.*, p. 138, procession to the temple of Dionysos during the Rural Dionysia as celebrated in the Piraeus. Cf. *ibid.*, n. 9, against the suggestion made by E. Buschor, *AM.* liii, 1928, p. 98, n. 1.

<sup>21</sup> Deubner, *op. cit.*, p. 125.

<sup>22</sup> For a discussion of ancient testimony regarding the Anthesteria, see Deubner, *op. cit.*, pp. 93 f.



*navalis* procession, ascribed to the day of the *Choes*.<sup>23</sup> But does anything in the vase-painting really refer to this event and its characteristic paraphernalia? There are no such references. The situation, as analyzed above, even contradicts the known facts of this celebration, for the same reason that made a relation to the "Great" Dionysia unlikely. The naval car, too, formed like a boat, carries the god to his sanctuary and stresses his arrival, not departure. There is another possibility, however. The rites of the Hieros Gamos did involve a departure when Dionysos, from his residence in the Limnaion, moved to the Bukoleion, which was the appointed place of the symbolical wedding ceremony. It is highly probable, but not certain, that there was a procession on this occasion.<sup>24</sup> Dionysos—his image or the Archon Basileus—had to be transported from one place to the other. The bride, the Basilinna, performed important and mysterious functions in the Limnaion and, consequently, had to be brought to the Bukoleion also. Later, she and perhaps the god, too, must return to the sanctuary in the marshes; but before that, it was unavoidable that both were carried to the official locality of the wedding rites, which was the Bukoleion. This means that whenever the slightest publicity was given to these movements to and fro of the sacred protagonists of the Gamos, a procession formed almost by itself. This occurred more likely before than after the rites symbolizing the marriage, after the analogy of ordinary wedding customs.<sup>25</sup> A procession from the Limnaion to the Bukoleion, which can, with good reason, be presumed as a part of the yearly Anthesteria, fulfilled the functions of a *pompe* in a very literal sense. It was to escort the god on his way from one to another destination.

Two reasons recommend this explanation for the New York oinochoe. First, it fits the represented situation. ΠΟΜΠΗ is making ready, the preparations occur in the immediate presence of the god, and the god is in his own quarters. He is seated, however, on the same kind of chair as appears on the often-quoted little vase, also in New York, which perhaps renders a childish re-enactment of this very procession.<sup>26</sup> There the chair has already been lifted on the car, and everything is ready for departure.

Second, this interpretation explains the general tenor of the representation. It does justice especially to the specific kind of images used to symbolize the procession in its relation to the god. One should not forget that the woman decking herself out, and Eros putting on his sandals, as iconographic types belong originally to the gynaeconitis and, especially, to the often-represented wedding scenes. Both evoke the memory of the most common among these scenes, the preparation of the bride. The latter may be dressing herself, or helped by friends and maids, or assisted by fluttering Erotes. The types and their basic significance are well known.<sup>27</sup> Un-

<sup>23</sup> *Ibid.*, p. 103.

<sup>24</sup> *Ibid.*, pp. 105, 109. Cf. M. Bieber, *History of the Greek and Roman Theatre*, p. 96, n. 7; G. W. Elderkin, "The Lenaion, Limnaion and Boukoleion in Athens," *Archaeol. Papers* v, p. 33. The wedding procession of Dionysos and the priestess-queen has already been discussed by A. Mommsen, *Feste der Stadt Athen*, pp. 393 f.

<sup>25</sup> For the procession to the house of the bridegroom, cf. L. Deubner, *JdI.* xv, 1900, p. 149; li, 1936, pp. 175 ff.; A. Brueckner, *AM.* xxxii, 1907, pp. 80 ff.; *RE.* xvi, p. 2130.

<sup>26</sup> Deubner, *Attische Feste*, pp. 104 f. and pl. xi, 3, 4.

<sup>27</sup> Cf. A. Brueckner, *AM. op. cit.*, pp. 79 ff.; the material requires re-examination. Figures tying shoes are especially often represented. Either Eros or the bride is so shown, as in Brueckner, *op. cit.*,



doubtedly even here, in the different context of the New York oinochoe, the figures of Eros and the dressing lady carry the erotic connotations of their traditional origin. Therefore, they seem very appropriate for an occasion which, like the ΠΟΜΠΗ in question, is also a wedding procession. Iconographically, the figure behaves like a bride, and this underlying parallel may explain why she looks so conspicuously back to Dionysos. In the London oinochoe Dionysos and the seated Basilinna similarly face each other.<sup>28</sup> The present case is different, for ΠΟΜΠΗ is not the bride herself. She only impersonates the procession which is to accompany the god. But while she exchanges with him this glance of mutual understanding, she adds a curiously sentimental and mystic note to the composition.

INDIANA UNIVERSITY

OTTO BRENDDEL

---

pl. 8, or Eros performs this service for the bride, as in *JdI.* xi, 1896, p. 194, no. 46 and Schefold, *Kertscher Vasen*, pl. 14a, etc.

<sup>28</sup> Deubner, *op. cit.*, pp. 101 f. and pl. x, 1, 2.



## NOTE ON A FESTIVAL JUG

THE fragmentary jug<sup>1</sup> presented here (fig. 1) is unusual among oinochoai associated with the celebration of the Anthesteria in that its scene includes a sculptured representation of the god of the festival. At the right of the picture a male figure bends over an altar; in the center, presiding over the sacrifice, stands a statue on a high base. From the left comes a youthful attendant who carries a basket of offerings and the wreathed jug which indicates the statue to be that of Dionysos.



FIG. 1.—SACRIFICE IN THE SANCTUARY OF DIONYSOS IN THE MARSHES

The battered remains of this figure suggest an archaic statue, or perhaps an ancient image in its traditional festival attire. The vase belongs to a period when statues are frequently rendered in an archaistic fashion,<sup>2</sup> but if our painter had a definite statue in mind he would have wished it to be recognizable, and its archaic look would derive from fact rather than from a vase-painting convention.

The assumption that the statue is one which actually existed, and to be differentiated from the representations of statues in mythological scenes, rests on the

<sup>1</sup> Athens, Agora Inv. P 5270; from a well filled in the last quarter of the fifth century. Mended from several pieces; brown wash inside; height preserved 0.122 m.; diameter of base 0.125 m. The statue is rendered in yellow over white, with details picked out in black; the glaze has peeled from the egg and dart moulding of its base. The wreath on the jug is obscured by a highlight. Manner of the Meidias painter.

<sup>2</sup> Schefold, "Statuen auf Vasenbildern," *JdI.* 52, 1937, pp. 30 ff.; esp. pp. 47 and 63.



association, indicated by the wreathed jug, of the sacrifice shown here with the rites of the 12th Anthesterion. The ceremonies of the Choes were familiar to every Athenian; in a picture closely related to actual experience an imaginary statue would be out of place. A statue of Dionysos, probably early, appears thus to have played a part in the celebration of the Anthesteria.

Such a statue would have been at home in the sanctuary of Dionysos in the Marshes, and it would be attractive to identify our scene with the report preserved by Athenaeus (10, 437 d) of the ceremonies there at the close of the drinking contest.<sup>3</sup> We are told that the priestess carried off the wreaths and sacrificed the left-over wine in the sanctuary. No mention is made of her assistants, but it will be recalled that in her other role as Basilinna a Hierokeryx ([Demosthen.] 59, 73 ff.) attended her at the betrothal mysteries in the same sanctuary. Although our scene cannot be identified with any precise moment of ritual, its association with the drinking-contest story seems probable.<sup>4</sup>

The large table-type altar, of which the remains were found by Dörpfeld in the precinct which he identified as that of Dionysos in the Marshes,<sup>5</sup> stood in the walled area at the north of the sanctuary, and there also the fourteen altars used in the Hieros Gamos ceremonies must have been set up. A statue of the elaborate character indicated by our vase can hardly, however, have stood out of doors. To give his scene in brief, the painter has juxtaposed an altar from the open temenos with the statue housed in the small temple to the south. This structure would have been curiously purposeless if no statue existed, yet the cella as excavated yielded no evidence for a statue base; the area where such a base might have stood was in fact covered by a flooring of pebbles set in lime mortar.

It is difficult to associate a flooring of the character described with the early date of the temple; it suggests rather a connection with the later uses of the sanctuary.<sup>6</sup> A re-examination of this temple would be of considerable interest. Traces of a statue base beneath the pebbled floor might well supplement our painter's efforts in restoring to us some knowledge of the revered but seldom seen figure of Dionysos in the Marshes.

LUCY TALCOTT

<sup>3</sup> The literature has been collected by Deubner, *Attische Feste*, pp. 93 ff.; I follow his analysis of the details of the festival. The many problems involved (see especially Nilsson, *Münch. Sitzungsab.* 1930, 4, pp. 3 ff.) do not appear to affect the identification of our vase.

<sup>4</sup> The Louvre jug (Deubner, *op. cit.*, pl. 13, 1-2) on which a child approaches an altar and a herm was suggested by van Hoorn (*RA.* 25, 1927, pp. 104 ff.) as a representation of this same scene. The association was disputed by Deubner, and subsequently van Hoorn in a letter to me questioned his earlier view on the ground that the Agora oinochoe shows Dionysos in the Marshes to have been a statue, not a herm.

<sup>5</sup> *AM.* 20, 1895, pp. 161 ff.; Judeich, *Topographie von Athen*, pp. 291 ff. The pebble flooring noted below appears on Dörpfeld's plan.

<sup>6</sup> Judeich (*op. cit.*, p. 296), commenting on the fact that the north part of the area was built over in Hellenistic or early Roman times, and the temple then repaired, suggests that in an era when a clear distinction between differing cults of Dionysos had been lost the sanctuary might have been moved to the theater vicinity. He notes that some such change would resolve the apparent contradiction between the accounts of the earliest sanctuary of Dionysos as given by Thucydides (ii, 15, 4) and Pausanias (i, 20, 2) respectively.



## A PRIZE FOR WOOL-WORKING

THE black-figured cup illustrated in figs. 1-5 was acquired by the Metropolitan Museum in 1944.<sup>1</sup> It had already served Bloesch, in his *Formen attischer Schalen*,<sup>2</sup> as the name-piece of a group of Attic kylikes belonging to the decade 540-530 B.C. It is said to have been found at Tarentum.

Of the decorations—three battle scenes and a warrior leading away a woman captive—we shall note only that the subject matter is surprising for a vase given as a prize in a girls' wool-working contest. For that this was the destination of our new kylix is shown by an inscription scratched on the foot (fig. 3): Μελώσας ἐμὶ νικατέρῳ · ξαίνωσα τὰς κόρας ἐνίκη<sup>3</sup>. The alphabet is Western (note X for Z) and the dialect belongs to the West Greek group. Nothing in either alphabet or dialect is incompatible with a Tarentine origin.<sup>4</sup> We therefore assume that the dialect is Tarentine and transliterate the o and e sounds as follows: Μελώσας ἡμὶ νικατήριον · ξαίνωσα τὰς κόρας ἐνίκη, "I am Melosa's prize.<sup>5</sup> She won the girls' carding contest."

That contests were held in carding—the work of disentangling the fibers of the wool and drawing them out parallel to one another—was not known to us earlier. Fine wool and fine weaving were both Tarentine specialities<sup>6</sup> and it may be that local pride gave rise to contests in wool-working there. Or might the match have had some connection with a religious observance, the making of a garment to be offered to a god? We are told that every year in Laconia women wove a chiton for Apollo of Amyklai, whose statue stood on the tomb of Hyakinthos.<sup>7</sup> In Tarentum too there was a tomb "called by some that of Hyakinthos and by others that of Apollo Hyakinthos."<sup>8</sup> As the founders of Tarentum were Laconians, and even perhaps, as is argued by Willeumier,<sup>9</sup> Amyclaeans, it is possible that they and their descendants observed in their new home the custom of offering yearly a chiton to Apollo.<sup>10</sup>

<sup>1</sup> Acc. no. 44.11.1. Ht. 4 13/16 inches (12.3 cm.). Broken at rim on one side and repaired, with a small piece restored. Interior decorated with concentric circles and dot. Briefly discussed by me in *BMA*, iii, 1944, pp. 110 ff.

<sup>2</sup> P. 8, "die Melusagruppe."

<sup>3</sup> The words are separated from each other by single points but, in accordance with the custom in punctuated inscriptions, there is no point between the article and its noun. The point after the νι of νικατέρῳ is obviously an error—a dittography of that after ἐμὶ. The surface is partially obscured by incrustation and rootmarks, some of which go over the inscription. This doubtless accounts for the faulty reading published by Bloesch, *loc. cit.*, and by D. M. Robinson, *Excavations at Olynthus* x, p. 374, note 106.

<sup>4</sup> For X = Z in the alphabet of Tarentum see Willeumier, *Istros* i, 1934, p. 15, and *Tarente*, p. 659.

<sup>5</sup> This seems to be the earliest occurrence of νικητήριον = prize.

<sup>6</sup> See Willeumier, *Tarente*, pp. 216 f., 219 ff.

<sup>7</sup> Paus. iii, 16, 2.

<sup>8</sup> Polybius viii, 28, 2 (30).

<sup>9</sup> *Op. cit.*, pp. 39 ff.

<sup>10</sup> Ξαίνωσα in our inscription would seem to imply wool. We are not told the material of the chiton offered to Apollo of Amyklai. We need not assume with Studniczka, *Beiträge zur Geschichte der altgriechischen Tracht*, p. 18, that "chiton" was used by the Laconians in this connection in its original sense "linen garment." Woolen chitons are of course known (see e.g. Herod. i, 195; vii, 91; Aristoph. *Frogs*, 1067; Pollux vii, 57; Studniczka, *op. cit.*, p. 26) and the narrow foldless garment covering the figure of Amyclaeon Apollo on Hellenistic silver coins (Imhoof-Blumer and Gardner, *Numismatic Commentary on Pausanias*, pl. N, xvi; Cook, *Zeus* i, p. 713, fig. 529) looks much more like wool than linen.





FIG. 1.—ATTIC EYE KYLIX IN THE METROPOLITAN MUSEUM. ABOUT 540-530 B.C.  
(Courtesy of the Metropolitan Museum of Art)

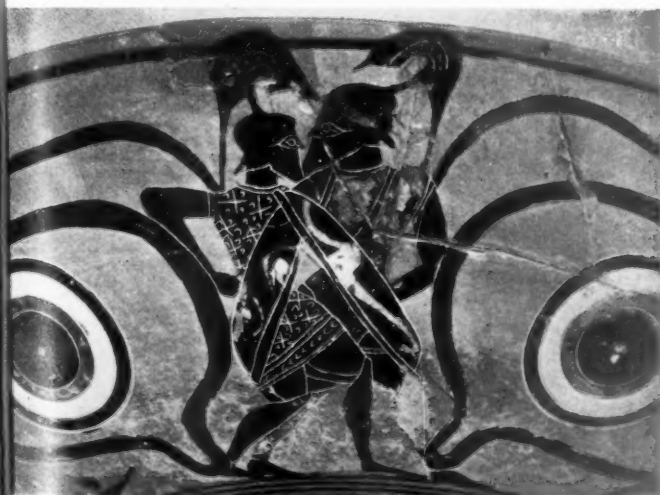


FIG. 2.—DETAIL OF KYLIX SHOWN IN FIG. 1  
(Courtesy of the Metropolitan Museum of Art)



FIG. 3.—INSCRIPTION ON FOOT OF KYLIX  
SHOWN IN FIG. 1  
(Courtesy of the Metropolitan Museum of Art)





FIG. 4.—DETAIL OF KYLIX SHOWN IN FIG. 1  
(Courtesy of the Metropolitan Museum of Art)

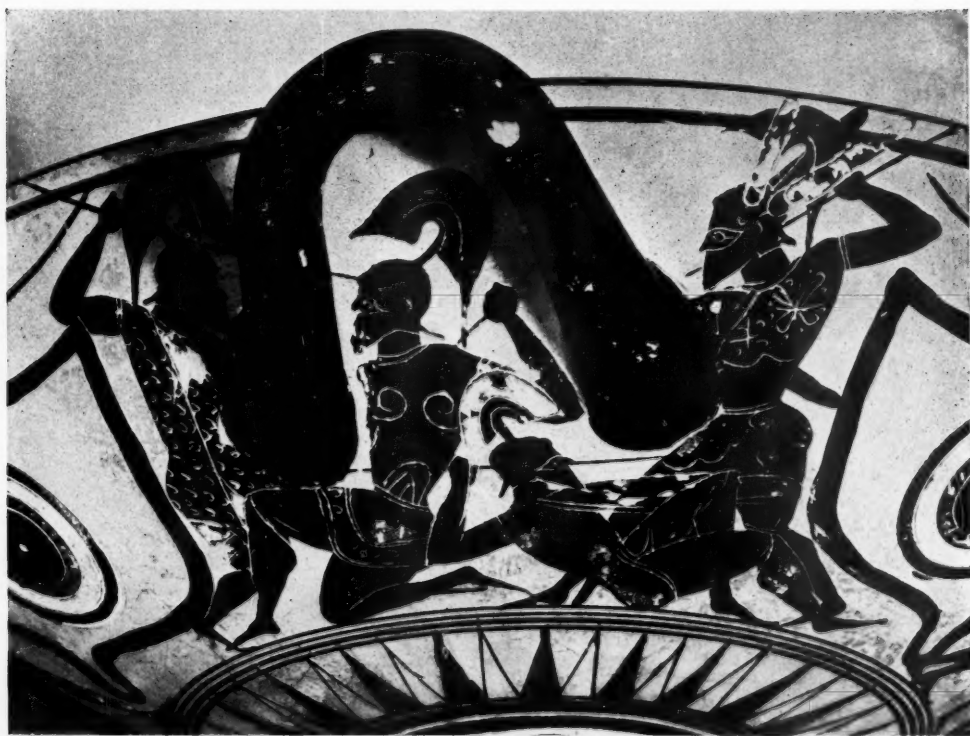


FIG. 5.—DETAIL OF KYLIX SHOWN IN FIG. 1  
(Courtesy of the Metropolitan Museum of Art)



Like the carding contest the name of the prizewinner Melosa—or Melousa as it would be in Attic and the Koine—raises questions. The name is a rare one. It appears in an epitaph of Roman date found in Sicily<sup>11</sup> and on four Attic vases of the fifth century B.C. On these vases it is given to mythological characters, a circumstance which at first glance seems to speak rather badly for the owner of our kylix. For mythological names were for the most part avoided by people of good standing in the pre-Roman period, particularly in the times preceding the fourth century. The hetairai, on the other hand, showed a marked fondness for them. Consequently there is some presumption that a woman who bore such a name was a hetaira.<sup>12</sup>

It is hard to believe however that our Melousa was anything but a nice girl. Wool-working, it is true, was not limited to the respectable.<sup>13</sup> But to enter a contest, win a prize, and then preserve that prize so carefully that it could be buried with one bespeaks an ardor and pride in domestic pursuits that we should not expect to find in a hetaira.

A way out of this difficulty is offered by the peculiar circumstances in which the name Melousa is given to mythological characters. The four vases in question were painted by three closely related painters, Polygnotos,<sup>14</sup> the Peleus Painter,<sup>15</sup> and an unnamed master who is "near the Peleus Painter."<sup>16</sup> The Peleus Painter makes Melousa a Muse. His imitator or rival shows her as an Amazon. Polygnotos also makes her an Amazon on one vase, but on another gives the name to a woman whom Apollo is rescuing from Tityos, i.e., to Leto. Now while Amazons were legion and one had a good deal of freedom in the choice of names to be assigned them, and while more than nine names have come down to us for the nine Muses, Leto, the mother of Apollo, was an important and highly individual personage whom we should certainly not expect to be called by any other name than her own. Of all the explanations proposed Friedrich Hauser's<sup>17</sup> is the most ingenious. He suggested that Melousa was a real person who was admired by the painter of these vases (for he took them to be the work of one man). The painter, as a compliment to her, gave her name to his most attractive creations. It is difficult, however, to believe that a painter of this period would have lightly given the name of an acquaintance even to a Muse, much less to a great goddess like Leto. It is more likely that we have here a simple confusion. These painters seem to have been a bit weak in their mythology. Polygnotos knew that Apollo had rescued a woman from Tityos but thought that she was merely a nymph, not his mother Leto. The Peleus Painter was not sure of the names of the nine Muses. But that all three painters should have chosen this uncommon name for their creations is, I think, best explained by Hauser's hypoth-

<sup>11</sup> *IG*. xiv, 337. The double lambda is a misspelling; cf. Meisterhans, *Grammatik der attischen Inschriften*<sup>2</sup>, p. 96, note 844.

<sup>12</sup> See Bechtel, *Die attischen Frauennamen*, pp. 69 ff.; M. J. Milne, *AJA*, xlv, 1942, pp. 217 ff. A warning against over-hasty conclusions in the matter of women's names is given by Wilhelm, *JOH*, xxv, 1929, pp. 59 ff. <sup>13</sup> Cf. Beazley, *JHS*, li, 1931, p. 121; Rodenwaldt, *AA*, 1932, cols. 7 ff.

<sup>14</sup> Louvre G375, *CVA*. Louvre, fasc. 8, III, I d, pl. 42, 1-4; Beazley, *ARV*, p. 680, no. 48. Oxford 522, *CVA*. Oxford, fasc. 1, III, I, pl. XXIX 3, 4; Beazley, *ARV*, p. 678, no. 10.

<sup>15</sup> British Museum E271, *FR*, pl. 139; Beazley, *ARV*, p. 687, no. 9.

<sup>16</sup> Leningrad 769, *Compte-Rendu* 1866, pl. 6; *MonInst.* viii, pl. 44; Beazley, *ARV*, p. 688.

<sup>17</sup> *FR*, iii, p. 107. A summary of the various theories on the use of the name on these vases is given by Lamer, *RE*, xv, cols. 591 ff.



esis that Melousa was the name of some one of their acquaintance. I suggest further that the name, though not specifically a mythological one, might have been thought appropriate to mythological characters by these painters.

In the first place, a woman admired by them and complimented in this fashion in their works would probably have been a hetaira. Since hetairai often bore mythological names, it was natural to suppose that a hetaira's name was mythological, particularly if you were not strong in your mythology and the name was of a form not often given to contemporary persons.

The name Melousa is the present active participle of a verb. Feminine names of this form are rather rare, and they were not in favor with the Athenians, who considered them more appropriate for their warships than for their daughters. For although sixteen such names of ships are recorded in Attic naval documents of the fourth century B.C.<sup>18</sup> (and Greek ships, we should note, were not as a rule named after actual persons),<sup>19</sup> there seems to be no certain instance of an Athenian citizen with a name of this type before the Roman age.<sup>20</sup>

A number of mythological names, on the other hand, had this form, and one at least, Medousa (and doubtless several others), must have been familiar even to Polygnotos and his fellows.

We see, therefore, how these painters could have jumped to the conclusion that their fair acquaintance was named after some nymph and that it was, consequently, permissible for them to give her name to the nymphs and other minor female characters from the realm of myth depicted in their works.

While Melousa would not have been a very respectable name in Athens in the sixth or fifth century B.C., it may have been honorable enough in Tarentum. The element *Mele-* or *Meli-*, though it occurs in mythological names, is not limited to them but is found also in a number of good historical names. Melousa itself originally must have been a pet name. The verb μέλω means (1) to care for or take an interest

<sup>18</sup> On the names of Athenian warships see Kurt Schmidt, *Die Namen der attischen Kriegsschiffe* (Diss. Leipzig, 1931). To his list add *Epinome* and *Heorte*, on a fragment of a fifth-century Athenian naval catalogue in the possession of D. M. Robinson, published by him in *AJA*, xli, 1937, pp. 292 ff. I wish to express my thanks to Professor Robinson for informing me of this fragment. The list of ancient ship's names given by Miltner in *RE*, Suppl. v, cols. 947 ff., is unfortunately not free from errors.

<sup>19</sup> No ship's name, identical with that of the person after whom the ship was called, is listed by Schmidt and Miltner. When, as rarely, a ship was named for a person, the name was altered. Three of these names, *Antigonis*, *Demetrias*, and *Ptolemais*, are those of sacred triremes and are derived from names of Hellenistic rulers. The fourth, *Aristonike*, occurs in a document of about 323-2 B.C., *IG*, ii<sup>2</sup>, 1632, 189. To this name is added the clause *ἦν ἐφη[ν]εν Ἀριστόνικος Μαραθ*; i.e. it was a foreign ship confiscated by the Athenians and named after the man who was instrumental in her confiscation. Evidently the fact that he bore a name of good omen, particularly suitable to a warship, led to the adoption of its feminine form as the new name of the confiscated ship (Schmidt, *op. cit.*, pp. 5, 51, 92).

<sup>20</sup> This statement is based on material collected by Bechtel, *Die attischen Frauennamen*. He has only six such names: *Areskousa*, *Bryousa*, *Thallousa* (also a ship's name), *Prepousa* (also a ship's name), *Eutyousa*, and *Pherousa* (a Nereid name). None is earlier than the fourth century B.C. The first three occur before the Roman age, but as names of a hetaira and a procuress and in epitaphs which do not give the father's name and so presumably do not belong to citizens. I do not include *Leomedousa* (Bechtel, pp. 23, 25; in a fourth-century epitaph without the father's name), as names in *-medousa* are merely feminines of names in *-medon* and accordingly belong to the traditional and socially acceptable stock of two-stemmed names.



in something, or (2) to be an object of care or solicitude. The second meaning is more likely to predominate in Melousa, which we may compare with μέλημα, a term of endearment used by the lover to his lass and the sister to her brother. Melema, too, appears as a woman's name in an epitaph from the Crimea.<sup>21</sup> "Darling" is as close as we can get in English to either word. Such pet names often displaced the given name, were passed on to descendants, and ended by becoming part of the regular stock of given names. This happened in Athens to a number of pet names of women formed from the adjectives "sweet," "little," and "dear," all borne by respectable members of society.<sup>22</sup> Such may have been the history of the name Melousa in Tarentum. We know too little of Tarentine names<sup>23</sup> to do more than hazard a guess.

If the reader should object that the prize itself, a large drinking cup, suggests that Melousa was no better than she should be, we would recall to his mind the famous inscription on a kantharos from Boeotia in the Louvre,<sup>24</sup> "Mogea gives as a gift to his wife Eucharis, daughter of Eutretiphantos, a cup that she may drink her fill."

METROPOLITAN MUSEUM OF ART

MARJORIE J. MILNE

<sup>21</sup> For μέλημα as a term of endearment see Aesch., *Cho.* 235, Ar., *Eccl.* 972. For the name see Bechtel, *Die historischen Personennamen*, p. 615, and Latyshev, *IPE.* iv, 408.

<sup>22</sup> Bechtel, *Die attischen Frauennamen*, pp. 41 ff. On pet names in general see *Die einstämmigen männlichen Personennamen des Griechischen die aus Spitznamen hervorgegangen sind*, by the same author.

<sup>23</sup> A Tarentine prosopographia is given by Willeumier, *op. cit.*, pp. 709 ff. We note that it includes a fragmentary name beginning Μελ- from an inscription of the IV-III century, *IG.* xiv, 668, col. II, 3.

<sup>24</sup> *IG.* vii, 3467; Pottier in *DS.*, s.v. *cotyla*, p. 1550.



### THREE MYCENAEAN VASES FROM CYPRUS IN THE METROPOLITAN MUSEUM OF ART

TO THE two well-known vases of Mycenaean pictorial style in the Metropolitan Museum can now be added a third krater, fragmentary, but an excellent and unique example of this ware. Like its relatives in New York, it was found in Cyprus by the American consul, General Luigi di Cesnola, in the 1860's and, although its provenance is not recorded, it bears the Cesnola pottery number C.P. 3815. This vase, which has never been published, was rediscovered in the basement of the Museum in February 1942 in a collection of Cesnola pottery fragments.<sup>1</sup> Though far from complete, sufficient fragments of the upper part of the vase remain to enable one to reconstruct the pictorial zone (figs. 1-4), and the vase-shape can be restored on analogy of the almost contemporary amphoroid krater from Maroni (C.P. 1403, figs. 8-10).

The three kraters, all of which are of amphoroid form (Furumark's Form 8:53-55)<sup>2</sup> with piriform body, straight or somewhat concave neck, and two vertical handles from lip to shoulder, form an interesting series covering at least one hundred years of development. Although the two complete examples have already been published in Cesnola's *Cyprus*, the *Atlas of the Cesnola Collection* and in Myres' *Handbook*, recent research has contributed much to our knowledge of Mycenaean pottery and has shown that the pictorial style is an integral part of the entire Mycenaean ceramic development.<sup>3</sup> It, therefore, seems desirable to republish these

<sup>1</sup> In the winter of 1942, the Metropolitan Museum, while rearranging its collection to meet the wartime emergency, decided to give to college museums some of the duplicate fragments of the Cesnola pottery collection. At the suggestion of Miss Mary H. Swindler, the writer went to the museum to select fragments for Bryn Mawr. During this visit I discovered and pieced together the fragments of C.P. 3815, and permission to publish was granted by Miss Gisela M. A. Richter, who also suggested that I undertake the republication of the Cesnola chariot kraters. I wish to thank Miss Richter for allowing me to examine and study these vases and for supplying me with photographs and measurements; Lt. Col. John Franklin Daniel of the University Museum, Philadelphia, for valuable advice and suggestions given while I was engaged on my dissertation on the pictorial style; and especially Miss Swindler who first aroused my interest in the Mycenaean field.

<sup>2</sup> The most recent and comprehensive study of Mycenaean pottery is that by the Swedish scholar Arne Furumark (*The Mycenaean Pottery: Analysis and Classification* and *The Chronology of Mycenaean Pottery*, Stockholm, 1941, hereafter abbreviated *MP.* and *CMP.*). Because of the war few copies have reached this country, but fortunately the copy sent to the *AJA.* and reviewed by Daniel has been available to me.

<sup>3</sup> Until recent years the pictorial style had not attracted much attention and was usually regarded as a late and decadent expression of Mycenaean art. A clearer orientation to the problem was given by Forsdyke in his publication of a krater from Maroni in the British Museum ("A Late Mycenaean Vase from Cyprus," in *Essays in Aegean Archaeology*, Oxford, 1927, pp. 27-30 pls. 1-11). Since then others have treated the subject: Stanley Casson (*Ancient Cyprus*, London, 1937, pp. 39-54 and pls. III-v); Claude F. A. Schaeffer ("Sur un cratère mycénien de Ras Shamra," *BSA.* xxxvii, 1936-37, pp. 212-235); Erik Sjöqvist (*Problems of the Late Cypriote Bronze Age*, Stockholm, 1940, pp. 71-2 and figs. 19-21) and Arne Furumark (*MP.*, pp. 430-465). Daniel, who has done extensive work on this subject, has as yet published his conclusions in only a few brief *Journal* notices (*AJA.* xliii, 1939, p. 355; xlvii, 1942, p. 121 and p. 290; xlvii, 1943, pp. 253-4). From such statements and from our conversations on this material, the writer finds herself in substantial agreement with Daniel both on questions of chronology and on the center of manufacture of the pictorial style.





FIG. 1.—MYCENAEAN KRATER FROM CYPRUS, C.P. 3815



FIG. 2.—DETAIL OF C.P. 3815



FIG. 3.—DETAIL OF C.P. 3815



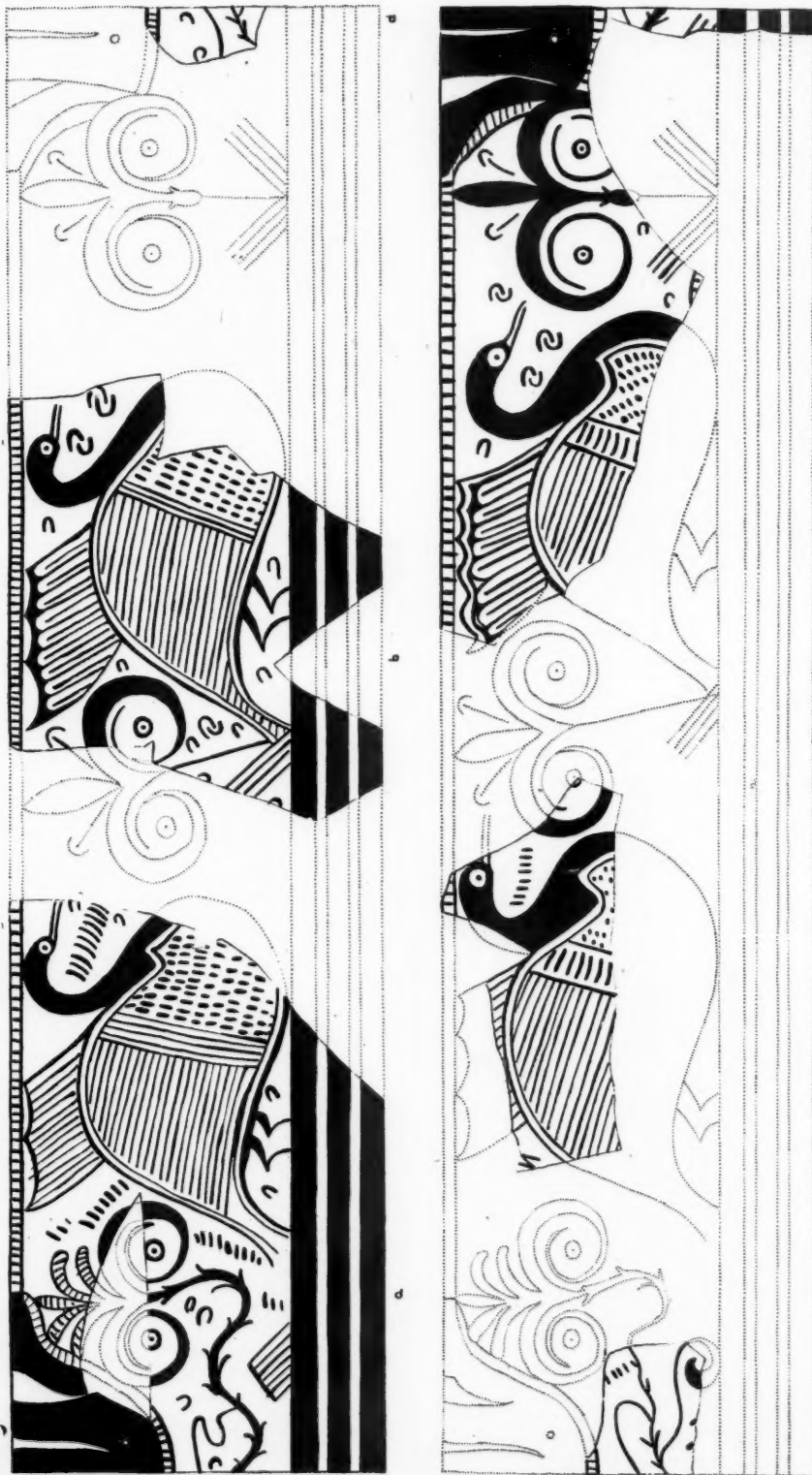


FIG. 4. — RECONSTRUCTION OF PICTORIAL ZONE OF C.P. 3815, SIDES A AND B



two vases, along with the fragmentary "new" example, and from them to form a short synthesis of the first one hundred years of the pictorial style, to discuss briefly rival theories that have been advanced as to the place of manufacture of this ware and to suggest its probable orientation. We shall begin with the unpublished example, which, although perhaps later by a couple of decades than the earlier chariot krater (C.P. 1403), is in its decoration more unique.

## I

C.P. 3815 (figs. 1-4)

Unpublished.

Dimensions: ht. as preserved 0.287 m.; diam. of rim 0.345 m.; ht. of neck 0.08 m.; ht. of decorative zone 0.127 m.; estimated total ht. on basis of proportions of C.P. 1403, 0.465 m.

Fabric: hard pinkish buff clay, gray at core, polished buff surface; lustrous reddish brown paint, somewhat cracked and fired black in places; several swollen bubbles on neck, due, according to Miss Richter, to "insufficient wedging."

Preservation: about two-thirds of rim, one handle and slightly less than half of the pictorially decorated shoulder zone preserved in a large fragment *a*, made up of numerous joins (cf. figs. 1 and 4). Four non-joining fragments which certainly belong to this vase: *b*, bird and part of floral ornament; *c*, upper part of another bird; *d*, small fragment with floral decoration; and a small fragment of rim and neck. From these five fragments it is possible to restore with reasonable certainty the pictorial zone as has been done in figure 4, which is based upon tracings from the original fragments. A sufficiently large arc of the greatest circumference of the vase is preserved in fragment *a* to enable us to estimate the total circumference at about 135 cm., and from this measurement the non-joining fragments *b*, *c* and *d* can be placed in a logical sequence. The resulting arrangement is a procession of four birds moving to the right, two on each side, alternating with elaborate floral patterns, five of which are preserved in part representing three different types. It will be seen that the two sides of the vase are almost exact counterparts of each other. Uncertainties are the type of floral pattern at the extreme right of side A, which has been restored as the duplicate of that preserved on side B; the exact intervening space between fragments *a* and *b* (*b* should perhaps be moved slightly to the right in our restoration to make a more symmetrical spacing); and the type of floral pattern to the left on side B, which, if the small fragment *d* is correctly placed beneath the missing handle, can be restored as the counterpart of that on side A.

Provenance unrecorded, but almost certainly from Cyprus, because it was among the Cesnola pottery fragments.

Although much less well preserved than the two chariot kraters (figs. 8-12) and hence less spectacular, the new vase is an equally important representative of the Mycenaean pictorial style. Its remarkable luxuriant and pseudo-naturalistic floral decoration, which appears to stem directly from the LM II/LH II Palace style, might at first suggest that this was the earliest of the three kraters in New York. On closer examination such a conclusion proves unjustified. The evidence, as we shall see, points to a date in the early Tell el-Amarna period, or approximately 1375 B.C.


In shape our new vase is an early specimen of the amphoroid krater, a form which seems to have evolved from the Minoan pithoid jar.<sup>4</sup> Bronze specimens of LM II/III date have been found in Cyprus,<sup>5</sup> and a connection between these non-ceramic ex-

<sup>4</sup> Furumark, *MP.*, p. 19, states that its prototype is "a variant of the pithoid jar with two opposite handles from rim to shoulder like an amphora."

<sup>5</sup> John L. Myres, *Handbook of the Cesnola Collection*, New York, 1914, pp. 473-4, no. 4703; Markides, *BSA.* xviii, 1912, p. 94, pl. viii. Evans dates them in the MM III/LM I period (Sir Arthur J. Evans, *The Palace of Minos at Knossos*, hereafter *PM.* ii, pp. 652 ff.), but Myres and Markides place them somewhat later, in the fourteenth century.



amples and the earliest Mycenaean amphoroid kraters is proved by the markedly metallic type of handle employed on the earliest fourteenth-century vases, such as C.P. 1403 (cf. fig. 9), where the handles splay slightly at the point of attachment to rim and shoulder and are ribbed in section with a pronounced central ridge, an evolutionary stage from the "originally metallic, sculptured handles of pithoid jars" to the broad flat handles of later amphoroid kraters.<sup>6</sup> The handles of our vase are in type intermediate between those of the Metropolitan chariot kraters, but definitely closer to those of the earlier vase. While preserving a distinct trace of the central plastic ridge, they are much less crisply profiled. This feature, together with the occurrence of certain distinctive Amarna filling ornaments, constitutes one of the surer arguments that our new krater is of slightly later date than the chariot krater from Maroni (C.P. 1403, figs. 8-10). These two vases, but not the third and latest krater (C.P. 1405, figs. 11-12), show an interesting, if not fully understood, feature present on many early Mycenaean amphoroid kraters — namely, pairs of perforations at the top and base of each handle. Schaeffer<sup>7</sup> has discussed this peculiarity and has suggested a number of explanations. The most satisfactory is that which regards them as "string-holes" to secure a lid or cover by means of a cord, which might indicate that the amphoroid krater originally served some useful function in the shipping or storing of produce.<sup>8</sup>

Another connection with metal prototypes is the pattern which decorates the rim or lip of the vase: a tongue pattern  which should be considered either a derivative of the Minoan foliate band of metallic type,<sup>9</sup> where, however, the "tongue" is more leaf-shaped and slopes more obliquely, or a separate and distinct tongue pattern also of toreutic inspiration. No exact parallel either for the pattern or its usage on a broad flat rim can be found, to the best of my knowledge, in metal or ceramic examples. On certain low bronze bowls or basins of the LM II period from Crete,<sup>10</sup> the broad horizontal rim is decorated with a foliate band in relief, which gives a similar, if somewhat more magnificent effect; likewise the triple layering or reduplication of the edge might have suggested the scalloped pattern which bounds the tongues on the rim of our krater. On the other hand, on the neck of a number of metal-inspired ceramic vases of the LM/LH I-II periods, notably ewers or jugs with cutaway necks, rhyta, alabastra, etc., the tongue pattern is frequently found, clearly in imitation of the plastic treatment of their more costly prototypes.<sup>11</sup> In these cases, however, the tongues are longer and the scalloped

<sup>6</sup> *MP.*, pp. 92-3.

<sup>7</sup> *BSA.* xxxvii, pp. 213-4.

<sup>8</sup> Although in many examples it is impossible to pass a cord through these "string-holes," they were originally pierced all the way through, and it therefore seems likely that they have become clogged with more recent accretions. Casson (*Anc. Cyp.*, pp. 50-51) has attacked the amphoroid krater as an object of export because of its cumbersome size and the fact that he feels it cannot have served any useful function. Daniel pointed out that Casson underestimated the intrinsic worth supplied by the pictorial decoration (*AJA.* xliii, 1939, p. 355). The presence of "string-holes" suggests that there may have been a dual reason for exporting amphoroid kraters: their value as *objets d'art* and the fact that they contained produce of some sort.

<sup>9</sup> *MP.*, p. 397, fig. 69, mot. 64:10, 11, 16.

<sup>10</sup> *PM.* ii, 2, p. 639, fig. 403.

<sup>11</sup> *PM.* iv, 1, p. 271, fig. 201 — alabastron from Mochlos; p. 283, fig. 217 — ewer from Palaikastro; p. 326, fig. 267 — LM IB rhyton; p. 328, fig. 271 — amphora from Knossos; Alan J. B. Wace, *Chamber Tombs at Mycenae*, hereafter *Ch.T.*, pl. xxxix, 3 — LH II ewer; Carl W. Blegen, *Korakou*, Concord, 1921, pl. v — LH II ewer; *Annuario* vi-vii, p. 185, fig. 108 — early LH III ewer from Ialysos.



border is lacking or vertical strokes have been inserted in the tongues. Even without exact parallels there can be no doubt of the ultimate toreutic derivation of this motive, and its occurrence, together with the metal-inspired handles, is but further corroboration of the early date of this krater. Our vase stands just at the point when crisply profiled forms were yielding to those which could more easily be produced in clay and yet before all connections with metal prototypes had been given up.

The neck of this vase is low and somewhat concave, similar in type to that of other early fourteenth-century amphoroid kraters. Here, however, the neck is decorated with three encircling bands of paint instead of the more usual scheme of one deep band of solid paint (cf. fig. 8).<sup>12</sup> For the body we must rely upon the complete early amphoroid krater in the Metropolitan (figs. 8-10). Although somewhat larger in size, our new krater must have had a similarly proportioned piriform body, terminating in a gracefully proportioned foot strong enough to support the vase, rather than the overly globular and top-heavy body which dwarfs the miniature base of the later New York vase (C.P. 1405, figs. 11-12).

Technically the new vase has much in common with the earlier chariot krater in the smooth hardness and polish<sup>13</sup> of the buff fabric and the lustrous quality of the paint, but here the paint is fired predominantly red rather than black and there is no use of superimposed matt white, features which may be of some slight significance in the chronological relationship of the two vases.<sup>14</sup>

The pictorial decoration on both sides of our vase consisted of two plump, long-necked water birds moving to the right in a luxuriant floral setting liberally strewn with small filling ornaments. The combination of birds and foliage, the seeming naturalism of the floral motives, as well as the general richness of decoration, all betray close connections with the Palace style. Yet when one analyzes the decorative motives individually, they are found to be a hodge-podge of many elements, some of which are clearly as late as the Amarna period. Among these must be reckoned the small filling ornaments, rows of dashes, U's, N's, quirks, etc., which can be paralleled on sherds of imported Mycenaean ware found by Petrie in the rubbish-heaps of the palace of Akhenaten at Tell el-Amarna in Egypt.<sup>15</sup> Since this palace was in use for

<sup>12</sup> A straight or wavy line between two horizontal bands occurs on the necks of several LM III kraters from Crete (Evans, *The Prehistoric Tombs of Knossos*, London, 1906, pp. 96-7, figs. 105-6) and on a Minoan import or imitation from Cyprus (H. B. Walters, *Catalogue of Greek and Etruscan Vases in the British Museum* i, ii, London, 1912, hereafter *BMCat.* i, ii, C 390), but here the treatment is scarcely close enough to warrant considering it a Minoan intrusion.

<sup>13</sup> Long regarded as an applied or true slip and so referred to in most catalogues of Mycenaean pottery (e.g. the *BMCat.*), the peculiar polished treatment of the surface of the finest Mycenaean vases has recently been disclosed by Daniel to be due merely to "wet-smoothing" rather than to the application of a separate coat of more refined clay which would warrant using the term "slip" (cf. *AJA.* xlvii, 1942, p. 286). Such a suggestion has been substantiated by petrographic analyses of thin sections of selected Mycenaean sherds undertaken for my dissertation by Prof. Wayne M. Felts of the Department of Geology of the University of Cincinnati. <sup>14</sup> Cf. discussion below of the fabric of C.P. 1403.

<sup>15</sup> W. M. Flinders Petrie, *Tell el-Amarna*, London, 1894, pls. xxvi-xxx. Especially important parallels with the Amarna fragments are the rows of short parallel strokes (Petrie, *op. cit.*, pl. xxvi, 2, 25; xxvii, 54; xxviii, 57, 67, 74); U's (*ibid.*, pl. xxix, 95, 100; xxx, 134, 137); "ladder-hatching" as at base of neck and at top of palmette on C.P. 3815 (*ibid.*, pl. xxvii, 53; xxix, 108); "panelling" as on birds' bodies (*ibid.*, pl. xxx, 114). A typical Amarna pattern, the N, is found on the fragment with bird, c.



only a short period, during the reigns of Akhenaten and his son-in-law Tutankhamen (i.e. from ca. 1375–1350 B.C.), the one thousand odd fragments of Mycenaean pottery discovered at this site form one of our surest cornerstones for the chronology of Mycenaean ware. Although no examples of the pictorial style were discovered at Tell el-Amarna, parallelisms between the motives which appear in a main decorative rôle on Amarna fragments and in a subsidiary position as filling ornaments on pictorial-style vases found elsewhere may be taken to indicate contemporaneity in manufacture, and can thus serve to isolate a group of Mycenaean vases with pictorial representations and to date them within narrow limits to the second quarter of the fourteenth century.<sup>16</sup> It is with this group<sup>17</sup> that our new vase would seem to ally itself on the evidence of the small filling ornaments. An examination of the larger pictorial motives leads, as we shall see, to much the same conclusion.

Since the figural decoration of this krater is in many ways unique, we shall analyze in detail the separate motives—the birds and the two main types of floral orna-



Fig. 5.—Comparative Study of Birds in Connection with those on C.P. 3815

a) *PM.* iv, 1, fig. 277b; b) *BM Cat.* i, ii, C372; c) *PM.* iv, 1, fig. 281; d) *Mon.Ant.* xiv, pl. xxxviii, 1

ments. Representations of birds are among the few motives in the Mycenaean pictorial style which can be traced back into the fifteenth-century Palace style, for they were one of the rare pictorial devices tolerated by the Cretan vase-painter in his predominantly floral and marine system of decoration.<sup>18</sup> Our species of bird, a waterfowl or duck, seems to belong to a Nilotic circle with Egyptian origins which can be paralleled on Minoan frescoes and gems, and on Palace style vases, notably the three-handled jar from Argos, which Evans and Furumark consider of Cretan manufacture.<sup>19</sup> It will be noted that this type (fig. 5a) is characterized by a plump rounded body with folded wings, dark throat marking, stippled breast, barred wings and scalloped tail feathers. A Minoan peculiarity, pointed out by Furumark, is that the tip of the folded wing extends beyond the line of the back in two or three pinions.<sup>20</sup> This type was taken over by the Mycenaean vase-painter and undoubtedly

<sup>16</sup> A method also applied by Daniel in establishing his LH IIIA:2 period (cf. *AJA.* xlv, 1942, p. 121). Petrie's somewhat too high dates for Tell el-Amarna have been lowered in the light of Meyer's study of the Egyptian calendar, as Fimmen points out (*Die Kretisch-Mykenische Kultur*, Leipzig and Berlin, 1924, pp. 145 ff.).

<sup>17</sup> E.g., Adolf Furtwängler and Georg Loeschke, *Mykenische Vasen*, Berlin, 1886 (hereafter *Myk. Vasen*), text, p. 28, fig. 16; *BM Cat.* i, ii, C 345, 412; *CVA.* Br. Mus., fasc. 1, II Cb, pl. vii, 4; Charbonneaux, *L'Art Egéen*, pl. lxiii, 3.

<sup>18</sup> *PM.* i, pp. 605 ff.

<sup>19</sup> Caravanserai fresco: *PM.* ii, 1, frontispiece; seals and sealings: *PM.* i, p. 275, fig. 204g; *PM.* iv, 2, p. 492, fig. 427; p. 588, fig. 582; p. 609, fig. 597 Be; p. 615, fig. 602; Palace-style vases: *PM.* iv, 1, p. 333, figs. 276–277 (Argos vase); p. 335, fig. 278; *Δελτ.* 1917, p. 156, fig. 117. On the Argos vase, cf. Furumark, *MP.*, p. 250.

<sup>20</sup> *MP.*, p. 195.



gave rise to the more conventionalized birds of the Amarna period (b), with which our birds have strong affinities in their rigidly subdivided bodies containing a variety of geometric ornamental designs: parallel lines and dashes and, on other vases, chevrons, U's, lattice pattern and dotted circle.<sup>21</sup> Our birds are slightly more naturalistically rendered in their larger heads and dark throat markings than those on the amphoroid kraters in the British Museum from Enkomi and Maroni (C 372 and 332) in which they find their closest parallels. The one conspicuous difference, however, from this well-known fourteenth-century Mycenaean type is the addition not of exaggerated pinions, such as are occasionally found (c),<sup>22</sup> but of a full-fledged projecting wing. This might at first glance seem a contamination from another type of bird, that with upraised wing (d), which seems to have been more popular in Late Minoan III than in Mycenaean representations.<sup>23</sup> Yet the inorganic shape of the wing with feathers sloping obliquely upward rather than downward and sprouting illogically from the back of the bird with *folded wing*, and the variety in the treatment of the feathers, in one case with a close resemblance to the tail pinions of the birds on the Argos vase, suggest that these wings were a convenient space-filler to add to the already rich and carpet-like denseness of the decoration.<sup>24</sup> This type, then, seems to have been a purely hybrid creation of the vase-painter, who borrowed the standard type of waterfowl with folded wings and added to this a non-functional upraised wing.

This assimilation and combination of once natural Minoan fresco and ceramic motives into elaborate but purely fantastic forms is characteristic also of the floral motives on the Metropolitan Museum krater. The general impression made by the rootlets, tendrils, curving stem and well-formed calyx of these plants is certainly that of a direct descendant of Minoan art with its sensitive and keen-eyed observation of nature. Unlike their earlier Minoan predecessors, however, these plants defy exact botanical classification and seem a whimsical combination of separate elements. This process of hybridization had, of course, already begun in the Minoan Palace style,<sup>25</sup> when elaboration and a decorative effect were emphasized more than truth to nature.

Despite this hybridization, the separate elements can be traced back to their antecedent natural forms, and, although no exact parallels for the motives *in toto* can be found in Minoan-Mycenaean representations, it is possible to suggest what

<sup>21</sup> *BMCat.* i, ii, C 372; C 332 = *CVA.* Br. Mus., fasc. 1, II Cb, pl. 9, 12; C 373 and 374 (probably slightly later in the fourteenth century); Einar Gjerstad, John Lindros, Erik Sjöqvist and Alfred Westholm, *The Swedish Cyprus Expedition*, Stockholm, 1934-35 (hereafter *SCE.*) i, pl. LXXVII, 259, cxxi, 5 (also slightly later). Cf. also Furumark, *MP.*, p. 249, fig. 29.

<sup>22</sup> Mycenaean vases with representations of birds with exaggerated pinions: *BMCat.* i, i, A 847; i, ii, C 390; *SCE.* i, Enkomi, Tomb 3, 260. Minoan examples: *PM.* iv, p. 338, fig. 281; Roes, *Oorsprung*, fig. 25.

<sup>23</sup> LM III alabaster from Phaistos, *Mon.Ant.* xiv, pls. 37:1 and 38; larnax from Palaikastro, *BSA.* viii, pl. XIX.

<sup>24</sup> One might perhaps argue that the painter of C.P. 3815 was attempting to represent birds with the right wing folded, the left raised, using as analogies an MM II seal from Crete (*PM.* i, p. 275, fig. 204g) and one of the so-called "Melian bird" vases of MH III date from the Shaft Graves at Mycenae (*PM.* i, fig. 405g). In neither case, however, is the resemblance to our birds striking, whereas the latter bear every possible resemblance to the birds of the Caravanserai—Argos—Amarna series with folded wing save in the curious non-structural projecting wing.

<sup>25</sup> *PM.* iv, 1, pp. 322 ff.



basic plant or flower most influenced each type of floral pattern on our vase. The two motives which occur on either side of the preserved handle and appear to have been duplicated with slight variations on the non-joining fragments differ in many details, yet present a certain basic similarity, owing no doubt to their large opposed spiral volutes. Such volutes are characteristic of three separate Palace-style and later motives—the lily, palm, and voluted papyrus—and it is from these three, especially the first two, that our plants seem to have been derived.<sup>26</sup>

The simpler and more easily explained of our floral motives is that to the left of the handle in figure 1, which appears to have been duplicated on the small non-joining fragments *b* and *c*, where, however, the plant is set obliquely. This pattern resembles the lily (fig. 6a)<sup>27</sup> in its volutes, anthered stamens and calyx, except that the central member of the top is not a stamen but a prominent leaf-shaped



FIG. 6. — COMPARATIVE STUDY OF LILY MOTIVE

a) *Ch.T.* Pl. XXXIX, 3; b) *PM.* iv, 1, Fig. 271; c) *Korakou*, Pl. VII, 1

shoot which is characteristic of the palm motive on Palace-style vases.<sup>28</sup> The closest of all parallels occurs on a Palace-style jar from Knossos (b),<sup>29</sup> which likewise has a triple division of the top, the central member representing a partly opened bud, two petals and one stamen of which are clearly visible. Even on this earlier example complete naturalism has been sacrificed, for the stamens should all be contained within the corolla. One additional feature of our floral pattern should be mentioned: the four parallel oblique lines to the left of the stem, almost certainly a conventional representation of upstanding rootlets. This root pattern is especially characteristic of floral patterns which decorate Ephyraean goblets (c),<sup>30</sup> a ware produced synchronously with the Palace style of LM/LH II but distinguished by a reserve and restraint in direct antithesis to the richness of the Palace style. Furthermore, this ware is just as distinctly mainland in its character, its typical goblet having evolved ultimately from the Gray Minyan pedestalled bowl, as the Palace style is Minoan in its inspiration. It is therefore interesting to find this Ephyraean feature in a decorative scheme derived predominantly from the Palace style.

The second type of floral pattern, that to the right of the handle, a duplicate of

<sup>26</sup> *PM.* ii, 2, pp. 473 ff. and fig. 285; pp. 493 ff. and fig. 301. <sup>27</sup> Wace, *Ch.T.*, pl. XXXIX, 3.

<sup>28</sup> Wace, *Ch.T.*, pl. v, 15; Δελτ. 1917, p. 202, fig. 146; *PM.* ii, 2, pp. 493 ff., esp. figs. 301–2. Cf. our fig. 7.

<sup>29</sup> *PM.* iv, 1, p. 328, fig. 271.

<sup>30</sup> Cf. the excellent discussion of this ware by Blegen in *Korakou*, pp. 54–7, and the illustrations of roots in pls. vi, 4 and vii, 1.



which seems to be preserved in the small non-joining fragment *d*, likewise bears the imprint of both lily and palm. The opposed volutes with dotted circles are the same, but the stamens, anthers, calyx, and straight stalk which made of the other a fairly convincing lily have here been replaced by a hatched five-lobed palmette and a gnarled undulating stalk with tendrils. However remote from one's conception of a stiff palm tree, there seems little doubt that this motive was the basis for our floral pattern. Such an evolution can be traced step by step on Palace style vases (fig. 7): from the vertical trees on LH II three-handled jars from Kakovotos and Mycenae (a),<sup>31</sup> to the obliquely placed palms on another Palace-style jar from Thebes and two alabastra from Mycenae (b)<sup>32</sup> which represent perhaps an abridgment or extraction of a single side member of the popular group of triple palms,<sup>33</sup> to a motive found on a three-handled jar from Chamber Tomb 529 at Mycenae (c)<sup>34</sup> which is



FIG. 7. — COMPARATIVE STUDY OF PALM MOTIVE

a) *AM.* 1909, Pl. XXII; b) 'Eφ. 1910, Pl. VIII, 1; c) *Ch.T.* Pl. IV, 2

at first glance more conspicuously floral than tree-like and is the closest of all parallels to the "palms" on our vase. The palm-like top with inflorescent streamers proves its derivation, but the knotted trunk has yielded to a delicate undulating stalk, very similar to that on our krater. Thus it would seem that whereas the first floral motive was predominantly of lily derivation with some palm intrusions, the second is essentially a transformation of the palm along floral lines, the closest parallels to which are all found on mainland rather than Cretan vases.

While the floral patterns are certainly derived from the fifteenth-century Palace style, they show in every case some slight change always in the direction of greater stylization and toward the creation of a more bizarre type. Although no *exact* fourteenth-century parallels can be found,<sup>35</sup> neither can any in the fifteenth century be

<sup>31</sup> *AM.* 1909, pl. XXII, 2; Δελτ. 1917, p. 202, fig. 146; Wace, *Ch.T.*, pl. v, 15.

<sup>32</sup> 'Eφ. 1910, pl. VIII, 1; *Ch.T.*, pl. XLVIII, 9-10.

<sup>33</sup> *PM.* ii, 2, pp. 493 ff.

<sup>34</sup> *Ch.T.*, pl. IV, 2.

<sup>35</sup> The closest parallel, also on a pictorial vase, is furnished by an amphoroid krater with chariot scenes from the recent Swedish excavations at Enkomi (Sjöqvist, *Problems*, fig. 19, 1), where the volutes, ladder-hatching, naturalistic calyx, and oblique position of the floral motives beneath the handles can all be matched. On this vase several of the floral patterns are clearly of palm derivation (Furumark's mot. 15 = Palm II, *MP.*, p. 279, fig. 39, 1) whereas the other belongs to the voluted papyrus class (Furumark's mot. 11, *MP.*, p. 265, fig. 34, 33). These two vases must be about contemporaneous, since the Swedish vase also has Amarna filling ornaments.



cited. In my opinion, they must be regarded as the product of an essentially conservative vase-painter, steeped in the Palace-style tradition, who none the less asserted his independence and gave rein to his imagination in creating bizarre and unique floral patterns and in adding an inorganic wing to a type of bird that all his contemporaries were content to paint in a more sensible but less picturesque fashion.

This vase, then, in its general richness of decoration, in its choice of subject matter and in its specific floral patterns shows itself to be the logical successor of the fifteenth-century Palace style and such a vase as the Argos three-handled jar, yet it is clearly as late as 1375 B.C. for the reasons we have cited. That the Palace style, which enjoyed such a widespread vogue throughout Crete and the mainland in the fifteenth century, was too hardy to die out abruptly as the new century dawned cannot be doubted.<sup>36</sup> Taste would not change overnight toward a simple banded stirrup-vase or piriform jar ornamented with a row of papyrus blossoms on the shoulder. Undoubtedly the great amphoroid kraters with pictorial representations, which begin at almost exactly the time the three-handled jars ornamented in the true Palace style leave off, served much the same purpose in satisfying a desire on the part of the vase-painter and consumer alike for something grandiose and showy. Some time must, however, have elapsed before the pictorial style was fully launched and vases could be turned out in ateliers in quantity along mass-production lines, some artists perhaps devoting themselves primarily to this ware. During this quarter of a century certain vase-painters sought inspiration for the decoration of their new vase shape, the amphoroid krater, in the outgoing Palace style and infused new life into it, as our vase-painter has attempted to do and has accomplished quite successfully; others turned to a new source of inspiration, the mural paintings which were being executed on the walls of mainland palaces. It was this latter course which was chosen by the painter of C.P. 1403 and most of his contemporaries and which shaped the path the pictorial style was to travel for the next two hundred years.

## II

C.P. 1403—Myres, no. 436 (figs. 8–10)

Publications: Cesnola, *Cyprus*, p. 268; *Atlas of the Cesnola Collection* ii, pls. CII–CIII; Myres, *Handbook*, p. 48, no. 436; Schaeffer, *BSA*, xxxvii, p. 231, fig. 31; Furumark, *MP.*, p. 593, 53:7.

Dimensions: total ht. 0.367 m.; diam. of rim 0.275 m.; ht. of neck 0.05 m.; ht. of decorative zone 0.14 m.

Fabric: buff fabric with lightly polished surface, lustrous brownish-black paint for decoration with creamy white matt paint superimposed for details of harness.

Preservation: complete and unbroken except for a small chip under one handle.

Provenance: according to Cesnola, *Cyprus*, p. 268, this vase was found at Amathus, but it has long been recognized that its provenance was probably nearby Maroni where Bronze Age remains have been discovered in quantity, whereas Amathus has yielded only later material (Walters, *BMCat.* i, ii, p. xvi).

This vase is a remarkable and important example of the Mycenaean pictorial style, not only because of its complete preservation, its technical excellence, and its meticulous draughtsmanship, but also because it is stylistically one of the earliest

<sup>36</sup> Fourteenth-century survivals of the Palace style may be seen in a three-handled jar from Ialysos (*Annuario* vi–vii, p. 129, fig. 50), a globular jug in Florence from Cyprus (*CVA. Firenze*, IIIa, pl. 1, 13) and a few other examples.





FIG. 8.—MYCENAEAN KRATER FROM MARONI, C.P. 1403



FIG. 9.—MYCENAEAN KRATER FROM MARONI, C.P. 1403



FIG. 11.—MYCENAEAN KRATER FROM HAGIA PARASKEVI, C.P. 1405



FIG. 12.—MYCENAEAN KRATER FROM HAGIA PARASKEVI, C.P. 1405





FIG. 10. — MYCENAEAN KRATER FROM MARONI, C.P. 1403



examples we possess of the so-called "Cypriote chariot krater." Since this type was to become a favorite in the fourteenth and early thirteenth centuries and occurs in a hundred or more examples from Cyprus, Syria, Palestine, Rhodes and the Greek mainland, it is interesting to note that an initial stage of this standard, mass-production type is represented by the Metropolitan Museum vase. Now generally recognized as belonging to the first quarter of the fourteenth century,<sup>37</sup> it illustrates many early features in its shape, technique, and pictorial decoration.

We have already discussed the shape of this vase, an early form of amphoroid krater with metallic handles, low concave neck, and well-formed piriform body, in connection with our new fragmentary krater and have shown that the vase under discussion is slightly earlier. The rim pattern, groups of horizontal herring-bones, however, shows little, if any, connection with metallic prototypes, unlike the tongue pattern on the new krater.

Technically, the excellence of the fabric with its lightly polished surface, glossy brownish black paint, and applied matt creamy white can be paralleled on other early fourteenth-century examples, notably the octopus chariot krater from the recent Swedish excavations at Enkomi.<sup>38</sup> The use of applied white paint was prevalent in LH I and II, when it was often used for rows of dots on tangents and the central eyes of spirals.<sup>39</sup> This practice of using matt white as a secondary color survives into the fourteenth century, occurring on an early LH III octopus fragment from the Ramp House at Mycenae<sup>40</sup> as well as for the harness on several chariot kraters.<sup>41</sup> During the Amarna period applied white paint enjoyed even greater popularity, occasionally being used for the main decoration, the ground having first been painted in dark lustrous varnish.<sup>42</sup> Except for a few sporadic occurrences, the use of superimposed white seems to have died out after the Amarna period, to be resumed again in a more prolific and coarser fashion on a group of late mainland pictorial-style vases, such as the Tiryns krater and affiliated fragments and the Warrior Vase from Mycenae.<sup>43</sup> In conclusion, it might be said that the brownish black varnish and applied creamy white matt paint of our krater, while not definitive evidence, lend confirmation to its early date.

The decorative syntax, the arrangement and manner of drawing the pictorial motives and the selection and use of filling ornaments are, however, our main criteria for dating this vase. It is one of a relatively small number where the vase-painter has decorated the shoulder of his vase with *four* chariot groups,<sup>44</sup> progressing to the right, two on each side, instead of the more abridged scheme with a single group

<sup>37</sup> Daniel's LH IIIA:1 (*AJA*, xlv, 1942, p. 121) and Furumark's Myc. III A:2e (*MP*, p. 241, fig. 26, 1), dated by both ca. 1400-1375 B.C.

<sup>38</sup> *SCE*, i, pl. cxx, 3-4.

<sup>39</sup> E.g., *BSA*, xxvi, pl. xxvib.

<sup>40</sup> *BSA*, xxv, pl. xive.

<sup>41</sup> *BMCat.* i, II, C 354, 340; *SCE*, i, pl. LXXVII, 257 = Sjöqvist, *Problems*, fig. 19, 1; Schaeffer, *Ugaritica*, p. 98, fig. 93.

<sup>42</sup> Two such examples of this "light-on-dark" technique are the fragments of amphoroid kraters with heart-shaped ivy leaves and shell-patterns from Tell el-Amarna (Petrie, *op. cit.*, pl. xxvii, 26-8, 33) and the pictorial-style krater with birds from Maroni, now in the British Museum (*BMCat.* i, II, C 332 = *CVA.*, fasc. 1, pl. 9, 12).

<sup>43</sup> Heinrich Schliemann, *Tiryns*, London, 1885, pls. XIV, xva-b, xvc and xxia-b, xvib, xxie; *BSA*, xxiv, pl. xivd; *Myk. Vasen*, pls. XLII-XLIII.

<sup>44</sup> Cf. *CVA.* Br.Mus., fasc. 1, II Cb, pl. VII, 4; *BMCat.* i, II, C 342, 344; Sjöqvist, *Problems*, fig. 19, 1; Cyprus Museum A 2025a, b, e, f, h (unpublished fragments).



on each side. Only by a very precise calculation of his space and by neat and accurate drawing was it possible for the painter to insert four complete chariot groups on the circumference of his vase, as he has done most successfully in this example. The chariot groups are of the well-known Mycenaean type frequently depicted on frescoes,<sup>46</sup> vases, and other works of representational art: <sup>46</sup> two figures of indeterminate sex dressed in long tight garments of dotted material, standing in a double-bodied, spotted chariot which has a four-spoked wheel and is drawn by two horses with tufted manes. Here, although conventionalized along customary lines—with the armless human bodies schematized in geometric form and the duality of the horses rendered with superimposed bodies in a kind of shorthand perspective, the presence of the second animal suggested only by the doubling of muzzles, legs and tails, as well as by four reins—the chariot group has rarely, if ever, been rendered with such meticulous care and fidelity by the Mycenaean vase-painter. One should note the careful drawing of the human heads, which can be compared with the heads of the women on the contemporary Kourion “window krater”<sup>47</sup> in the manner in which the ear is reserved in the curly hair and the eye an elongated oval adjacent to the bridge of the nose; the accurate delineation of the lower part of the chariot seen behind the upper two quadrants of the wheel; the well-shaped and delicate horses’ legs with fetlock represented <sup>48</sup> and hooves poised neatly on the lower boundary of the pictorial zone; their spirited heads with tufted mane and frontal prominence correctly placed; and the detailed rendering of the harness in superimposed white. Such accuracy is the hallmark of an early date, since the Mycenaean pictorial style, unlike most others, began full-fledged in the early fourteenth century, gradually disintegrated and departed from relative naturalism toward greater and greater conventionalization. Another unusual feature is the adorning of the second chariot body to the right on the reverse of the vase (cf. fig. 10) with large irregular blotches of dark paint. This method is doubtless an attempt to reproduce the ox-hide covering of the chariot body and is paralleled on early renderings of the ox-hide shield and a few other chariot kraters of the earliest stage.<sup>49</sup>

The treatment of the background likewise supports our early dating for this vase. Only two motives are used: wavy bands of veined rock-work separating the chariot groups and occurring also in semicircular patches pendant from the neck; simple shell filling ornaments below the reins and between the horses’ legs. The second motive is a less helpful chronological indication, since it is a relatively simple and enduring one, occurring quite frequently in pictorial compositions.<sup>50</sup> The wavy rock-

<sup>46</sup> G. Rodenwaldt, *Tiryns* ii, Athens, 1912, pl. II, 4 and 6; *Der Fries des Megarons von Mykenai*, Halle, 1921, *Beilagen* III, IV, fragments 15–6.

<sup>47</sup> Georg Karo, *Die Schachtgräber von Mykenai*, München, 1933, pls. v–vi; *PM.* iv, 2, p. 419, fig. 348 (from Vaphio tomb); p. 579, fig. 564 (signet from Shaft Grave IV); *Ep.* 1889, pl. x, 30 (from Vaphio tomb); *PM.* iv, 2, p. 820, fig. 798 (lost fragment from Mycenae silver Siege Rhyton).

<sup>48</sup> *BMCat.* i, II, C 391. Cf. Furumark, *MP.*, p. 258, fig. 25a; Daniel, *Univ. Mus. Bull.* viii, 1, 1940, pl. Ivd (new fragments from Kourion).

<sup>49</sup> This accuracy is not often observed in Mycenaean equine representations, but recurs on late examples from the mainland such as the Tiryns Warrior vase (cf. Schliemann, *Tiryns*, pl. XIV).

<sup>50</sup> *PM.* iii, pl. XXIII (fresco); figs. 200–1 (LM IB aryballo from Gezer and Phylakopi); *BMCat.* i, II, C 339, 344, 348 (chariot kraters).

<sup>51</sup> This motive is derived by Furumark from the “zwickel papyrus” (*MP.*, p. 265, fig. 34, mot. 11:64–66) or the “bivalve shell” (p. 315, fig. 53, mot. 25:4, 13).



work band, however, is found only at an early period and is limited entirely to the pictorial style.<sup>51</sup> Both Forsdyke and Furumark have shown its dependence upon fresco paintings.<sup>52</sup> The rock-work on our vase is closest to that found on the magnificent krater in the British Museum decorated with a procession of long-horned Cretan wild goats, published by Forsdyke and also from Maroni. Although the rock-work on the British Museum example is somewhat less conventionalized in the arrangement of its veining, there is one band on the New York vase—that immediately to the left of the handle in figure 9—which is an even closer link to the veined rocks of fresco paintings. With its solid bands alternating with groups of fine horizontal lines it may be compared with the treatment of the rocks on the "groom" fresco from the Small Megaron at Mycenae, dated to the turn from the fifteenth to the fourteenth century.<sup>53</sup> It may accordingly be regarded as confirmatory evidence that the Mycenaean pictorial style had its origin in mainland fresco paintings, a point to which we shall return in our concluding remarks.

All aspects, then, of our vase point toward a date not later than the first quarter of the fourteenth century and suggest that it is one of the earliest examples with the standard type of chariot scene that has survived. If it is one of the earliest chariot kraters, its New York companion, C.P. 1405, is conversely one of the latest amphoroid kraters to which this popular pictorial decoration has been applied.

### III

C.P. 1405—Myres, no. 437 (figs. 11–12)

Publications: Cesnola, *Cyprus*, p. 247; *Atlas of the Cesnola Collection* ii, pls. c–c1; Myres, *Handbook*, p. 48, no. 437; Perrot-Chipiez, *Hist. de l'art* iii, p. 714, fig. 525 (direction reversed); Furumark, *MP.*, p. 238, fig. 25, mot. 10:1 and p. 240.

Dimensions: total ht. 0.42 m.; diam. of rim 0.31 m.; ht. of neck 0.113 m.; ht. of decorative zone 0.12 m.

Fabric: pinkish fabric with less smooth and polished surface than C.P. 1403, matt orange-red paint, no superimposed white.

Preservation: complete, although broken and repaired.

Provenance: Hagia Paraskevi near Nikosia, according to Cesnola.

By comparing this vase with the preceding example, the changes which the shape underwent in a hundred years of evolution become strikingly clear. Most salient is the change in proportions, the upper part having become heavier and more emphatic at the expense of the foot which seems scarcely broad enough to support the vase. Consonant with this change in proportions, the curve of the profile has become exaggerated to such a degree that it lacks the firmness and strength of earlier amphoroid kraters. Other equally well-marked alterations of all essential parts of the vase may be noted: the broad and strap-like handles project awkwardly and abnormally far from the rim, lacking any trace of the earlier crisp profiling; the rim is broader; the neck has become so high that it is between a quarter and a third the total height of the vase instead of approximately one-sixth, as in the earlier chariot krater C.P. 1403. It is this last feature which contributes to the ungainly and top-heavy effect of the vase, an effect which shows very clearly that this vase form had

<sup>51</sup> *BMCat.* i, ii, C 332, 366, 368, 373; *BCH.* 1907, p. 232, figs. 10–12; *SCE.* i, pl. cxx, 3–4; Sjöqvist, *Problems*, fig. 19, 1. <sup>52</sup> *Essays in Aegean Archaeology*, p. 29; *MP.*, p. 328. <sup>53</sup> *BSA.* xxv, pl. 27.



already run its course and was ready to be superseded, if indeed it had not been already,<sup>54</sup> by a new form of krater, the wide-mouthed deep bowl with loop handles.

A comparison of the fabric and technique with that of the earlier krater is also forcible in showing the decadent character of the vase under discussion. The dull, unpolished surface, pitted with impurities and with wheel-marks unremoved in a final smoothing, forms a vivid contrast to the hard and almost burnished fabric of C.P. 1403. The paint, too, of this late vase is of a very different quality and color: a matt orange-red completely lacking any semblance of lustre and badly flaked off.

The general decorative scheme of these two vases is similar: a broad band of solid paint on neck and foot, encircling bands in groups of three and two below the pictorial zone, a simple geometric pattern on the rim—here groups of parallel strokes with a crossed lozenge between, and chariot groups on obverse and reverse. A comparison of the pictorial zone especially reveals the late quality of our vase. Here the more complex composition of the earlier krater with two chariots has yielded to the labor-saving device of a single chariot on each side. Since the decorative zone is less high than in earlier examples, the entire chariot motive has been elongated, especially the horse and chariot bodies, and compressed in height. By means of this distortion a good part of each side has been filled by the chariot motive; what little remains is taken care of by filling ornaments.

Although the chariot compositions are essentially of the same type as those on the earlier one, they betray evidence of more careless and decadent draughtsmanship. The two "princes" are no longer tall enough to appear standing in the chariot; their features are carelessly drawn and their faces in general grotesque and "bird-like." The chariot body no longer preserves any reminiscence of its ox-hide covered model but is mathematically decorated with concentric rows of dots; furthermore, the lower extremity is terminated abruptly by the rim of the wheel and is not visible between the spokes.<sup>55</sup> The wheel has four spokes, as on all Mycenaean chariots, but here, as in a few other vases, they are indicated by double lines, perhaps to suggest the existence of the second wheel. The second horse, however, is much less skillfully indicated than in the earlier krater, the main evidence of its presence being the second large eye, muzzle and tail, and the four reins. As for the second set of legs, the general draughtsmanship is so clumsy that these might easily be mistaken for part of the outline of the first set. One wonders whether even the vase-painter knew what he was about, for in one case the legs curve outward toward the feet in an almost forklike fashion and are filled in by parallel vertical lines. The general equine rendering is also far removed from the meticulously drawn horses of the earlier krater. Not only is the body unnaturally elongated and the hindquarters impossibly

<sup>54</sup> It seems clear that the earliest deep loop-handled bowls with pictorial decorations which begin at the outset of the thirteenth century (cf. *BMCat.* i, ii, C 397, 398, 399; Schaeffer, *Ugaritica*, p. 103, fig. 96E) are somewhat earlier than the latest amphoroid kraters and that there must have been a period of at least a quarter of a century in which the two types overlapped.

<sup>55</sup> In all except a few rare cases (such as the early octopus chariot krater from Enkomi, *SCE.* i, pl. cxx, 3-4), the lower part of the chariot is carefully represented behind the chariot wheels in the first quarter of the fourteenth century, with some frequency in the Amarna period, but is practically non-existent in the second half of the fourteenth and early thirteenth century (cf. Furumark's mot. 39, *MP.*, p. 333, fig. 56).



exaggerated, but the hindlegs and tails defy the ground level established by the forelegs and chariot wheels, descending as low as the third encircling band. Furthermore, such niceties as the fetlock and neatly drawn hooves, the frontal prominence, stiff ears and details of harness are all either glossed over or omitted entirely. Such complete deterioration in detail suggests a considerable interval of time for the process of degeneration, especially since we have examples of clearly marked intervening stages.

That this process covered a hundred years, its lower limit marked by this vase and its relatives,<sup>56</sup> might at first glance seem surprising, were it not for the chronological evidence afforded by the filling ornaments, motives much more susceptible of absolute dating than the pictorial ones. All the filling ornaments are conclusively of LH IIIB type, i.e. of thirteenth-century date, with close parallels in mainland contexts of the intermediate period which separates standard fourteenth-century Amarna ware from the Granary level of the late thirteenth and twelfth centuries.<sup>57</sup> The Potter's Shop at Zygouries<sup>58</sup> has furnished the best ceramic context for this stage of Mycenaean ware.

To begin with, we have the floral motive termed by Furumark the "Mycenaean III flower"<sup>59</sup> present on this vase in five examples. Probably derived from the stiff unvoluted papyrus, this particular form with reduplicated angular stem, arch-shaped dotted top and dotted stamen is confined entirely to the thirteenth century.<sup>60</sup> The other floral motive, represented in three examples, is apparently an evolution from the palm of unvoluted type.<sup>61</sup> Likewise the parallel reverse L's beside the stem may have evolved from the upstanding rootlets of Ephyraean renderings of the palm.<sup>62</sup>

Whether the female figure or "goddess" who stands stiffly to the right of the chariot on figure 11 should be reckoned an integral part of the pictorial composition or another filling ornament is questionable. Her body is marked by hieratic stiffness and frontality, her breasts are prominently indicated by spiraliform patterns suggesting that she is a relative of the Minoan-Mediterranean mother goddess, and her arms are upraised in that primitive gesture of prayer or entreaty,<sup>63</sup> associating her

<sup>56</sup> Such as Fairbanks, *Catalogue of Greek and Etruscan Vases in the Museum of Fine Arts, Boston*, Cambridge, 1928, pl. x, 143; Sjöqvist, *Problems*, fig. 20, 1.

<sup>57</sup> For the chronology of Mycenaean pottery, cf. Forsdyke, *BMCat.* i, 1, pp. xli-xliii; R. W. Hutchinson, "A Note on Late Mycenaean Vases," *LAAA.* xix, 1932, pp. 117-120; Mogens B. Mackeprang, "Late Mycenaean Vases," *AJA.* xlii, 1938, pp. 537-559; O. Broneer, "A Mycenaean Fountain on the Athenian Acropolis," *Hesperia* viii, 1939, pp. 317-433; John F. Daniel, *AJA.* xlv, 1940, pp. 552-9; and Arne Furumark, *CMP.*

<sup>58</sup> Carl W. Blegen, *Zygouries*, Cambridge, Mass., 1928, pp. 143-167 and pls. xvi-xviii.

<sup>59</sup> *MP.*, mot. 18, pp. 284-298.

<sup>60</sup> Furumark sees a more complex evolution of the Mycenaean III flower as a "transformation of the III A:1 lily under the influence of the late LM III A:1-LM IIIA:2 hybrid floral types with the Palace style papyrus as the basic element" (*MP.*, p. 286). Although this type is more usually voluted, fairly close parallels may be found in Furumark's IIIB series of mot. 18, notably nos. 29 (no stamen and top not dotted) and 102 (wavy stem). <sup>61</sup> Cf. *MP.*, pp. 278 ff., mot. 15 (Palm II), nos. 13-14.

<sup>62</sup> Interestingly enough, an almost identical flower is found on a late wide-mouthed krater with two vertical strap handles from Aegina ('*Ep.* 1910, pl. vii, 4), there coupled with an "octopus" of Zygouries type and thereby leaving no question as to its intermediate or thirteenth-century date.

<sup>63</sup> Or perhaps connected with the fertility cult: cf. the paper "The Goddess with Upraised Arms" presented by Prof. Mary H. Swindler at the Forty-Second General Meeting of the Archaeological Institute of America at Baltimore and summarized in *AJA.* xlv, 1941, p. 87.



with the well-known class of Mycenaean terracotta idols with horned excrescences rising from their disc-shaped bodies (Furumark's  $\Psi$  type).<sup>64</sup> All these features would seem to indicate that she is a goddess, though whether a representation of the goddess herself or of some effigy of the goddess is debatable.<sup>65</sup> Another possible interpretation, which would recognize in this figure a mortal protagonist in the scene—a woman bidding farewell to her husband or son as he is about to set out for war or the chase—has less to substantiate it. Although a female figure with upraised hand is found on the famous Warrior vase from Mycenae,<sup>66</sup> the woman is clearly human and equally clearly taking an animated part in the action. In the case of our vase, not only does the hieratic stiffness argue against this theory, but also the fact that we must guard against interpreting too literally as a "scene" the juxtaposition of separate elements on most vases of the pictorial style.<sup>67</sup> Disproportionate sizes of birds and horses,<sup>68</sup> impossible combinations of land and marine elements, strange medleys of motives all show that the Mycenaean vase-painter strung together separate elements often with a decorative rather than a pictorial significance. This was particularly true once the established types had passed into the *koine* or common repertory of the vase-painter.

In the light of these considerations, it is inadvisable to interpret this figure too strictly either as a goddess or a mortal woman participating in the chariot scene. When one compares her with other contemporary decorative motives and discovers how much she has in common with both the Mycenaean IIIB flower and stylized octopus patterns used to decorate Zygouries goblets,<sup>69</sup> one realizes that whatever narrative significance she came to acquire through her association with the other pictorial motives was probably not foremost in the vase-painter's mind at the time when he painted the vase. Rather, through a curious freak of fantasy and perhaps only half realizing what he was doing, the painter seems to have created this "goddess" by adding a human head to the popular thirteenth-century decorative octopus-floral pattern. In any case, this "goddess" apparently has very little to contribute to our knowledge of Mycenaean religion, cult practices, or the existence of life-size statues in the thirteenth century. On the other hand, her close resemblance

<sup>64</sup> *CMP.*, pp. 86–9 and fig. 1, where the three main types of Mycenaean figurines have been ingeniously named for the Greek letters they resemble, Phi, Tau, and Psi.

<sup>65</sup> Although as far as I can find, no one has treated this figure as a goddess, or has used it in connection with the problem of monumental sculpture in Mycenaean times, it raises much the same question as do representations of deities on Late Geometric and Protocorinthian Vases discussed by V. Müller (*MMS.* v, p. 160), i.e. whether they are representations of "an actual deity appearing to the worshippers" or a cult image of the goddess.

<sup>66</sup> *Myk. Vasen*, pls. XLII–XLIII.

<sup>67</sup> Furumark, *MP.*, p. 430, warns against reading a narrative significance into the pictorial representations on Lev.-Myc. vases, but points out (*MP.*, p. 451) that the late mainland or "Hellado-Mycenaean" style, to which the Warrior vase belongs, is essentially narrative in character.

<sup>68</sup> Cf. the use of a large bird as a filling ornament beneath the handle of an amphoroid krater from Ras Shamra (*BSA.* xxxvii, p. 213, fig. 1) which Schaeffer has, I feel, misinterpreted by bringing it into direct connection with the chariot group and giving it a mythological significance (the hunt for a great bird chained in the desert which is mentioned in some of the tablets from Ugarit). Furumark (*MP.*, p. 434) apparently shares this opinion as to the "accessorial character" of such birds and fish.

<sup>69</sup> Blegen, *Zygouries*, p. 146, fig. 137:4 and 7. Also *MP.*, p. 286, fig. 42, no. 25. Furumark (*MP.*, p. 240) has also pointed out that this figure is "a curious cross with the Myc. III flower, in which the inverted volutes represent the breasts."



to thirteenth-century decorative patterns is but further confirmation of the late date of this vase.

A very minor filling ornament leads to the same conclusion: the lozenge which occurs in two types, crossed on the rim and in the field in figure 11, segmented in the field on figure 12. The lozenge, although a simple device, does not play an important part in Mycenaean ceramic decoration until the thirteenth century, when it appears on a stirrup-vase found in a context dated to the late XVIIIth–XIXth dynasty at Gurob in Egypt, as well as on a kylix from the Potter's Shop at Zygouries, and when it seems to have replaced the quirks, U's, dashes and other typical Amarna filling ornaments on pictorial vases, now mostly on the loop-handled type of krater.<sup>70</sup>

In conclusion, it might be said that there is every reason to date our krater to the intermediate or LH IIIB stage of Mycenaean ceramics, certainly after 1300, and perhaps as late as 1275 B.C. Not only its decadent shape and technique, as well as the degeneration of the pictorial motives, make this theory tenable, but the close parallels between the filling ornaments and the "goddess" to motives on Zygouries goblets render any other suggestion impossible.

From these three kraters in the Metropolitan Museum, a fair idea of the early development of the Mycenaean pictorial style can be formulated. At the turn of the fifteenth century when clay amphoroid kraters were first put on the market, there was perhaps a quarter of a century of experimentation before a "standard" type of decoration was evolved. It is to this period that the finest, most original and most inspired examples belong, for perhaps as yet they were still the product of only the most gifted painters, or of those who had direct access to sources of inspiration outside their minor craft, and were not yet turned out along mass-production lines. C.P. 1403 clearly belongs to this first stage by virtue of every stylistic and chronological argument; it is closely associated with the finest pictorial creations of this quarter century, such as the Maroni krater with leaping goats and the Kourion "window krater"; like them it seems to have been inspired by the monumental art of wall painting, but more clearly than most of its contemporaries to anticipate what was to become the standard type of amphoroid-krater decoration for the next one hundred years. Just the reverse is true of the new fragmentary krater, C.P. 3815; although chronologically later and probably falling just at the start of the mass-production Amarna or *koine* style, it is in a sense a more unique piece, looking backward in time and seeking its inspiration in the outmoded, but gracious, fifteenth-century ceramic Palace style. The fresco and not the ceramic tradition, however, carried the day, and soon chariot kraters were being turned out in great quantity for every market in the Levant, particularly Cyprus. The height of their production was undoubtedly the Amarna period (within strict chronological limits) and its continuation in the second half of the fourteenth century, but, as we have seen, their manufacture ran on into the first quarter of the thirteenth century in such decadent examples as C.P. 1405. Certainly, when judged by the standards

<sup>70</sup> Guy Brunton and Reginald Engelbach, *Gurob*, London, 1927, pl. xxvii, 17; Blegen, *Zygouries*, pl. xvi, 2. Cf. Furumark's table of the lozenge motive, all examples of which are of LH IIIB or later date (*MP.*, p. 411, fig. 71). For the use of the lozenge as filling ornament on pictorial-style vases, cf. *BMCat.* i, ii, C 403, 411, 575, etc.



of the grace, precision, and naturalism of the early New York vase, this late krater has all the earmarks of a style that has outrun its course. From it one might conclude that the Mycenaean pictorial style had reached its closing phase. This would, however, be far from the truth, for this degeneration marks only the close of the first chapter and not of the entire history. Capable of regeneration and transformation, the Mycenaean pictorial style was to produce a different, but perhaps equally beautiful expression in the thirteenth-century loop-handled kraters with their mathematical panelling, antithetic compositions, neatly drawn but schematic bulls and birds with precise geometric markings.<sup>71</sup> And even when this style in turn had run its course and yielded to a debased Levantine type,<sup>72</sup> the Mycenaean pictorial style was once again capable of rejuvenation, and in the closing days of this civilization, in the LH IIIC period, yielded at least three distinct offshoots: the late mainland phase marked by the Tiryns krater, the Warrior vase from Mycenae and related fragments; the Close style with its intricate overall ornamentation and schematized birds; and the Late Rhodian style with its birds and fish, usually contained within the coiling tentacles of an octopus.<sup>73</sup> These developments are, however, outside the scope of this paper.

So far we have said nothing about the controversial question of the place of manufacture of this ware. Although strong arguments have been adduced by most scholars of Cypriote and Levantine prehistory to support their claim to a local "Levanto-Helladic"<sup>74</sup> class of pottery to which they would undoubtedly assign our three vases, their strongest argument still remains the question of distribution, most examples having been found in Cyprus and the East, which is not an infallible guide to the center of production.<sup>75</sup> Likewise, other evidence, such as the so-called "potters' marks," an occasional Levantine shape, etc., is capable of quite a different interpretation from that of Levantine manufacture.<sup>76</sup> Over against these arguments

<sup>71</sup> *BMCat.* i, ii, C 397, 400, 402, 403, 408, 409, 411, 416.

<sup>72</sup> Such as *BMCat.* i, ii, C 417, 418, 420, 422, etc. Furumark's "rude style," *MP.*, pp. 465-470.

<sup>73</sup> *Late mainland:* Schliemann, *Tiryns*, pls. xiv, xva-b, xvc and xxia-b, xvib, xxie; *BSA.* xxiv, pl. xivd; *Myk.Vasen*, pls. xxxviii-xlili; *Close style:* *BSA.* xxv, pls. viib, ixb, xg; *Myk.Vasen*, pls. xxxvii, 380, xxxviii, 393; *Late Rhodian:* *Myk.Vasen*, pl. iv, 24; *Annuario* vi-vii, p. 118, fig. 39; *BMCat.* i, i, A 1015, 1016, 1022.

<sup>74</sup> This was the terminology first used in the *SCE.* to suggest the eastern origin of the Mycenaean ware found in Cypriote chamber tombs of the Late Bronze Age. Gjerstad, in his earlier *Studies on Prehistoric Cyprus*, Upsala, 1926, pp. 219-220, had proposed that the Mycenaean ware found in Cyprus was of mainland manufacture and that there was no Greek colonization of the island until the time of the Dorian invasion of Greece. Other Swedes, however, have been staunch adherents of Levantine manufacture, notably Sjöqvist (*Problems*, pp. 92-7) and Furumark (*MP.*, pp. 462-5). Likewise Schaeffer (*Missions en Chypre*, Paris, 1936, pp. 75 ff.) and Casson (*Ancient Cyprus*, pp. 72-109) favor eastern centers of manufacture, relying on such evidence as "deformities" occurring on vases found in the East and the so-called "potters' marks." The strongest adherents of mainland manufacture are Forsdyke (*Essays in Aegean Archaeology*, pp. 27-30) and Daniel (*AJA.* xlvi, 1942, pp. 289-290; xlvii, 1943, pp. 253-4).

<sup>75</sup> A ware made on the mainland primarily for the Levantine export trade would supply the same conditions of distribution (cf. Daniel, *AJA.* xlvi, 1942, p. 290).

<sup>76</sup> The "potters' marks" cited by Schaeffer (*Missions en Chypre*, pp. 76-7 and Appendice 1) and Casson (*Ancient Cyprus*, pp. 72-109, especially pp. 72-9) may more logically be explained as monograms of dealers, since they are painted in a matt red paint and were presumably added after the vase had been ornamented and the paint dried, and there is as yet no evidence that they have been fired (Daniel, *AJA.* xlv, 1941, pp. 265-6 and fig. 10). Likewise, the few Levantine shapes that occur in the standard



looms the telling evidence of the identity of clay and technique of the so-called Levanto-Helladic with mainland Mycenaean vases, even when the fabric is analyzed petrographically;<sup>77</sup> the parallel and synchronous development of shapes, filling ornaments, and methods of composition on vases from the two regions;<sup>78</sup> and finally the dependence of vase-painters for their initial inspiration upon great mural paintings, such as have been found only in the palaces of mainland rulers.<sup>79</sup> It would be a curious phenomenon indeed if the finest ceramic product of the Mycenaean age, a product which has such a peculiarly Mycenaean connotation throughout, were the creation of a provincial region like Cyprus. The writer has no hesitation in affirming her private conviction that the *bulk* of Mycenaean pictorial-style vases, in which the three in the Metropolitan Museum would be included,<sup>80</sup> were manufactured on the mainland of Greece, and were doubtless intended primarily for the export trade. It may be premature to assert this conclusion with absolute finality, though that day may not be far off. Further petrographic analyses of sherds and clay beds will be necessary, but with the publication of the contents of the Potter's Kiln discovered not long before the war at Berbati on the mainland of Greece, only a few miles from Mycenae, we shall undoubtedly have a clearer orientation toward this problem. Brief notices of this find have already furnished cogent evidence for a mainland center of manufacture, since in the discarded *Fehlbrände* from the kiln were

Mycenaean pottery of the thirteenth century and play such an important part in Sjöqvist's analysis (*Problems*, pp. 94-5) may be explained as mainland products for "a Cypriote order" (Daniel, *AJA.* xlv, p. 289).

<sup>77</sup> In connection with my doctoral dissertation a series of selected potsherds were examined petrographically by Prof. Wayne M. Felts of the Geology Department of the University of Cincinnati. These consisted of a Mycenaean pictorial-style fragment from the Cesnola Collection, decorated with birds in a style and technique differing in no essentials from C.P. 3815, several other pictorial-style fragments from Ras Shamra, some native Cypriote sherds from the Cesnola Collection and some fragments of Mycenaean pottery picked up on a number of mainland Greek sites. The significant conclusion from this examination was that the Cesnola fragment with bird decoration did not show any essential differences from standard LH III ware found at Troy, Aegina, Tiryns, Mycenae and Berbati and allies itself with this group rather than with the Levantine sherds. Only further analyses can show definitely whether this uniformity is the result of a "technique," as Casson believes (*Ancient Cyprus*, pp. 48-9), or of a common geographical center of production, viz. the Mycenaean mainland.

<sup>78</sup> This approach was used to some extent in my dissertation and had also been applied by Daniel in his dating of Mycenaean pictorial-style vases (*AJA.* xlv, 1942, p. 121). It has now been fully demonstrated in Furumark's *MP.* where he classifies and traces the development of both motives and shapes and where, if one is sufficiently painstaking in consulting his indices, one discovers an amazing uniformity of development in different regions down to the period ca. 1230 B.C. and the severing of Mycenaean commercial relations with the Levant.

<sup>79</sup> Dependence of Mycenaean pictorial vases upon fresco prototypes was first pointed out by Forsdyke (*Essays in Aegean Archaeology*, p. 29) and while generally recognized by scholars, has proved one of the main "thorns in the flesh" for the Levantinists, especially since no Mycenaean palaces with mural paintings have been unearthed in the East. Furumark wistfully remarks: "Some day a Mycenaean palace may be discovered in the East, say in Caria. This would alter the whole problem. At present further speculations on this subject seem to be useless." (*MP.*, p. 463). One of the most circuitous arguments is presented by Casson (*Ancient Cyprus*, p. 43, n. 3), who thinks that the pictorial vases were products of one-time fresco painters who "when fresco-painting began to decay (it continued down to the latest palace period at Tiryns, ca. 1200 B.C.) . . . took to painting pots and carried with them (to Cyprus) a degenerate style derived from earlier fresco styles."

<sup>80</sup> In this "bulk" of Mycenaean pictorial-style vases I would not include those vases which are not of standard fabric, i.e. the two fabrics mentioned by Daniel (*AJA.* xlv, 1942, p. 289), both of which were presumably made in the East in imitation of imported Mycenaean ware.



found thirteen fragmentary amphoroid kraters with chariot scenes which "do not show any significant differences from the contemporary Lev.-Myc. examples" as well as many other pictorial-style fragments for which Furumark gives close Levantine parallels.<sup>81</sup> Only after photographs of these fragments have been published and they have been compared with pictorial-style vases from the East can a definitive conclusion be reached; at any rate, the fact that the first atelier of pictorial-style vases to be discovered was located on the mainland of Greece should give pause to those who would create a "Levanto-Helladic" style based on an eastern center of production.

The issue of the place of manufacture of the pictorial style has been confused by an attempt to draw it into the larger question of Mycenaean colonization of the East.<sup>82</sup> Scholars have sought "proof" of such colonization in what they considered a local class of Mycenaean ware. Actually, the two problems, although interrelated, are quite separate issues. Should it be proved that Mycenaean pictorial-style vases were made on the mainland, they are at least evidence of strong Mycenaean penetration of the regions in question, largely in the form of commercial expansion, but doubtless also involving a limited colonization. Whether this class of pottery actually resolves the troubled problem of Mycenaean expansion, which it can scarcely do single-handed, it is at least intrinsically interesting and important and merits attention as the finest ceramic product of its age. It has been from this viewpoint, rather than the broader historical one, that the two Cesnola chariot kraters in the Metropolitan Museum have been restudied and that the new fragmentary krater has been presented to the public.

WELLESLEY COLLEGE

SARA ANDERSON IMMERWAHR

<sup>81</sup> Å. Åkerström, "En mykenssk krukmakverstad," in *Nordisk Familjeboks Manadskronika*, 1939, 669-672 (I have not seen this publication); *AA.* 1938, 552 ff.; Å. Åkerström, "Das Mykenische Töpferviertel in Berbati in der Argolis," *Bericht, VI. Internationaler Kongress für Archäologie*, Berlin, 1939, pp. 296-8; Schaeffer, *Missions en Chypre*, p. 117, n. 3; Furumark, *MP.*, *passim*.

<sup>82</sup> While this article was in proof, two interesting articles by Gjerstad concerning the Mycenaean colonization of Cyprus have come to my attention: "The Initial Date of the Cypriote Iron Age," and "The Colonization of Cyprus in Greek Legend," *Opuscula Archaeologica* iii (*Skrifter utgivna av Svenska Institutet i Rom* x, 1944), pp. 73-106 and 107-123. He still adheres to his former view that the Achaean colonization of Cyprus took place in the twelfth century B.C. (*op. cit.*, p. 87), which might suggest that he has not altered his earlier theory that the standard Mycenaean ware of the fourteenth and thirteenth centuries found in Cyprus was of mainland origin (cf. *Studies*, pp. 219-220).



## A SIGNET-RING IN THE CITY ART MUSEUM OF ST. LOUIS

THE signet-ring illustrated in figures 1-3 was presented to the City Art Museum of St. Louis by Kurt W. Bachstitz in 1924.<sup>1</sup> Its provenience and the conditions under which it was found are not known; the only available information on its pedigree states that it comes from Greece. There can be no doubt that the ring is an original piece. It is made of bronze and on its bezel a seal is carved and plated in gold. The ring measures 3.5 cm. in extreme length and 1.8 cm. in extreme width. Its irregularly elliptical hoop measures 2 cm. by 1.3 cm. (inner maximum measurements). The small opening of the hoop certainly proves that our example is a signet-ring and that it was not meant to be worn on a finger. The bezel, apparently made simply by pressure when the metal was hot, is a broad oval, almost a circle, and measures 1.4 cm. by 1.2 cm.

The design, carved in intaglio, is well placed within the broad bezel (figs. 2 and 3). It consists of a man holding a woman by the wrist. The male figure, rendered in profile, is bearded, has long hair dressed on the head and collected in a loop behind the neck, is wearing a wreath and a short chiton similar to that worn by Perseus on the Thermos metope.<sup>2</sup> The arrangement of the chiton below the waist is treated in a different manner, however, and finds its parallel in the "hunter and dog" on the plaque of Timonidas now in Berlin.<sup>3</sup> A number of shallow incisions, visible on the chest, and the broad band around the hem would indicate that the chiton was very elaborate and had a rich border similar to that seen on the chitons of Perseus and the Timonidas' hunter. The chiton is secured around the waist by a three-coiled belt, fig. 4, from which are suspended fillets with an ornament.

The woman, posed in full front view with head turned toward the man, is also elaborately dressed. Her hair is beautifully arranged around her head, and some locks apparently fall in curls behind her neck. She wears an elaborate στεφάνη, or coronet, studded with raised circle ornaments. Her chiton, similar to those worn by the goddesses on the Thermos metope,<sup>4</sup> has short sleeves, is secured around the slender waist by a double belt, and is decorated below by a rich triple border, the uppermost of which is adorned with circles. From her waist are pendant at least five globular ornaments, suspended by fillets that add to the festive character of the chiton. Apparently she wears a peplos or veil, attached to the back of her head; it

<sup>1</sup> To the Acting Director of the Museum, Charles Nagel Jr., and to its Acting Secretary, Merritt Hitt, I wish to express my indebtedness for their permission to publish the ring. I wish also to tender my thanks to Miss Catherine Filsinger, Assistant Curator of the Museum, for facilities extended to me in the study of the ring, and for her assistance in establishing many details of the engraving. A brief unpublished article by the late J. B. Music, entitled "A Mycenaean Seal Ring," was placed at my disposal. On Music's drawing is based our figure 4, made after careful examination of the details by means of the Museum microscope. The drawings, figures 4, 5, 6, 7, were made by my colleague Professor Paul Valenti and by I. A. Mori of the School of Architecture, Washington University, to whom I wish to express my thanks. Photographs 1, 2 and 3 are here made available by courtesy of the City Art Museum of St. Louis.

<sup>2</sup> M. H. Swindler, *Ancient Painting* 1929, pl. vi, opposite page 110, and E. Pfuhl, *MuZ.* iii, 1923, fig. 482.

<sup>3</sup> Swindler, *op. cit.*, fig. 206. Pfuhl, *op. cit.* iii, fig. 182.

<sup>4</sup> Pfuhl, *op. cit.* iii, fig. 483.





FIG. 1.—BRONZE SIGNET-RING IN THE CITY ART MUSEUM OF ST. LOUIS

(Courtesy of the City Art Museum, St. Louis)



FIG. 2.—SEAL ON THE BEZEL OF THE SIGNET-RING IN THE CITY ART MUSEUM OF ST. LOUIS

(Courtesy of the City Art Museum, St. Louis)



FIG. 3.—SEAL ON THE BEZEL OF THE SIGNET-RING IN THE CITY ART MUSEUM OF ST. LOUIS ENLARGED ABOUT THREE AND ONE-HALF TIMES

can be distinguished along one side of her neck, beyond her "pearly locks," and its ends, to which are attached some globular ornaments, can be seen clearly on either side of her waist. She also wore earrings. One of these, in the form of a large globe, is clearly seen against her neck. Presumably it was suspended from her ear that is not indicated in any way. Perhaps we should also note that the chiton ends well above her ankles, and that her feet, heel to heel and with toes facing in opposite directions, are engraved somewhat deeper than the rest (fig. 2). In the impression this extra depth would result in a higher relief by means of which her sandals would be indicated. One of her hands, left in the intaglio (figs. 2, 3), right on the impression (fig. 4), is held tightly at the wrist by the man; the other, bent at the elbow, is raised with palm open, thumb extended and separated from the other extended fingers. The faces of both figures are long, their features rather sharp, the eyes round and rendered in



full front view, the lips very full and pouting. The lips of the man are parted, as if speaking; her lips are tightly closed, and below them a projecting chin is strongly modeled. This pointed chin, like the long beard of the man, is made by long deep incisions. Characteristically, both figures have long necks. The arms of the woman are well modeled, and her elbows are carefully singled out and marked by deep curving lines. This special treatment brings to mind the Homeric λευκώλενος, an attribute of beauty and a special epithet of Hera.<sup>5</sup> The arms and especially the legs of the man are muscular and extremely powerful. The stance of the woman is somewhat stiff and archaic, but possesses a great deal of character, and the turn of the head and the raised arm add life and charm to the composition. The vigor of the man's grip and his lively step forward match the charm of the woman's gesture.

The man stands only 1.2 cm. in height, and the woman only 1.1 cm., and yet in that small scale details are rendered with a sharpness and precision that compare well with the work of the gem-engravers of the Minoan-Mycenaean world. As the minute details come into view under the powerful lens of a modern microscope and arrange themselves in a logical and beautiful design, one wonders how the carver could have accomplished such an ex-

cellent task without the help of a magnifying glass. In this work he used both the drill and wheel. Traces of these tools are visible on all the parts of the seal. The engraving is not so deep as that of Mycenaean gold rings, nor so shallow as on Ionic silver rings, but the lines are vigorous and certain and the modeling is exceptionally good.

For a time the ring was considered Mycenaean. Its detailed renderings and excellent workmanship, the elaborate costume of the woman, and the supposed loin-cloth of the man,<sup>6</sup> were reasons enough for this attribution. Furthermore, it was re-



FIG. 4.—DRAWINGS OF THE FIGURES ON THE SEAL. FROM A PLASTER IMPRESSION. ENLARGED APPROXIMATELY SEVEN TIMES

<sup>5</sup> *Iliad* i, 55.

<sup>6</sup> The arrangement of the chiton below the triple belt, and the difficulty in making out the upper part



membered that signet-rings are among the most characteristic articles of the Minoan-Mycenaean world.<sup>7</sup> The St. Louis ring, however, must be placed in a later period, not only because of its material, but also because of its form and decoration. Minoan-Mycenaean signet-rings, as a rule, are made of gold. This, of course, by itself could not prove that the St. Louis example is of a later date, especially since we have at least one ring of bronze from the Mycenaean world. This was found in the Vaphio tomb and was published by Tsountas.<sup>8</sup> The form of our ring, especially its bezel, proves definitely that it does not belong with the gold rings of the Minoan-Mycenaean world, for the bezels of those rings, often very elongated, are always

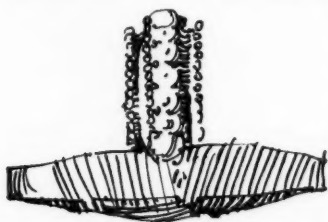


FIG. 5.—TYPICAL MINOAN-MYCE-  
NAEAN RING. THE RING OF NESTOR  
(EVANS, *PM.* IV, FIG. 915b)

placed at right angles to the run of the hoop (fig. 5).<sup>9</sup> The design on the bezel, on close examination, especially the details of dress and features, will prove that it is unlike those of prehistoric rings. There can be no doubt that the St. Louis ring is not a Minoan-Mycenaean work of art.

It is accepted widely that the art of making signet-rings was abandoned at the close of the Minoan-Mycenaean era. It is worth noting, in connection with this, that rings are not mentioned in the Homeric poems. Indeed, the art of the gem-engraver fell into disuse in Geometric times. The few examples that have survived from that period are primitive in technique and poor in inspiration.<sup>10</sup> But the art was revived in the eighth century, and perhaps in Ionia and the islands of the Cyclades. The Melian gems are well known, and perhaps point to the Minoan-Mycenaean tradition as the influencing factor of this revival.<sup>11</sup> Rings appear again in the seventh century, when we have the so-called Ionic silver rings. Beginning with the sixth century they became so popular, at least in Athens, that Solon found it necessary to promulgate a special law forbidding the gem-engravers to make and keep impressions of the rings they sold.<sup>12</sup> This law certainly proves that signet-rings were used for sealing documents and property. Rings were also used as amulets and charms, and

of the garment were responsible for the notion that the man was wearing a loin-cloth. This, naturally enough, was assumed to be of a Minoan type. But even if he were wearing a loin-cloth, it could not be of Minoan type. The only example of a loin-cloth that resembles the arrangement of the lower part of our chiton is to be seen on an engraved red jasper ring found at Mycenae in 1892 and described by Tsountas (Chr. Tsountas and J. I. Manatt, *The Mycenaean Age*, 1897, p. 160, fig. 54). On that ring we have a bearded man, wearing what has been taken to be a loin-cloth, "holding at arm's length two lions." Sir Arthur Evans, in discussing the figure (*PM.* iv, p. 584) has pointed out that this loin-cloth is "abnormal for a Minoan male figure," and its two front ends reminded him of a similar arrangement found on Chaldaean cylinder designs. In view of the similarity existing between our representation and that on the jasper ring, we are wondering whether that ring belongs to the Mycenaean Age, in spite of the fact that it was found at Mycenae.

<sup>7</sup> Sir A. Evans, *PM.* iv, p. 958.

<sup>8</sup> *Εφ.* 1889, p. 171, pl. x, 40

<sup>9</sup> Evans, *op. cit.* iv, p. 510. The peculiar form is explained by "its origin from a type of a perforated bead for suspension with an engraved facet." Our fig. 5 is taken from Evans iv, p. 948, fig. 915b.

<sup>10</sup> S. Casson, *The Technique of Early Greek Sculpture*, 1933, pp. 44-46; *AJ.* 1927, p. 38.

<sup>11</sup> Evans, *op. cit.*, iv, 560.

<sup>12</sup> Diogenes Laert. i, 57: δακτυλογράφῳ μὴ ἐξεῖναι σφραγίδα φυλάττειν τοῦ πραθέντος δακτυλίου.



those made in silver could even cure one of a scorpion's bite.<sup>13</sup> They were used, however, as ornaments to be displayed even in the days of Aristophanes, who singled out the Sophists as the perpetrators of this act of bad taste, and in his usual brilliant manner conferred on them the title of the σφραγιδονυχάργοκομήται.<sup>14</sup> Perhaps we should remark that the ancient Greeks did not use rings for betrothals or marriages. The value of such rings in antiquity varied as widely as it does today. Some of them cost but a few obols or a drachma. Others were very valuable. Aristophanes mentions the rings made by Eudemos that cost a drachma; but rings could be bought for three obols in his time.<sup>15</sup> The story of Polycrates, so excellently told by Herodotus, gives us an example of a very valuable and expensive ring.<sup>16</sup>

Signet-rings were produced throughout the Greek period and in Roman days. It was then that they were used in betrothals and marriages for the first time. As a matter of fact, about the third century of our era a gold signet-ring was in use very much like the St. Louis specimen. Marshall calls it type "E xviii," and describes it in detail.<sup>17</sup> The design on the bezel, however, clearly proves that the signet-ring in St. Louis cannot belong to that late Roman date. The sharp features of the face, the angular disposition of hands and feet, the rendering of eyes and lips, the details of costume, will certainly place our ring in the pre-classical Greek period. The broad decorative borders of the chitons, for example, find their parallels in the elaborate decoration of the chitons worn by figures painted on the Thermos metopes, and on terracotta figurines of the Early Archaic period.<sup>18</sup> The way the chiton of the woman is collected around her waist is reminiscent of a similar arrangement on the Nicandra statue. The tight fit of the chiton about the chest and the prominent breasts, find parallels in similar features on the Woman from Auxerre. The latter wears an elaborate belt divided in three zones.<sup>19</sup> The round, prominent, bulging eyes may be compared with profit to the large circles with dots used to indicate eyes on late Geometric vases.<sup>20</sup> The bulging muscles of the man's legs find counterparts in representations on the same vases. But the most valuable feature of the composition, one that will enable us to place it more accurately, is the long, narrow neck with which both figures are endowed. This element is to be found in the few representations of men we have from the Geometric period. On the Attic-Geometric composition il-

<sup>13</sup> *Geopon.* xiii, 9, 2: τὴν δὲ ἀπὸ σκορπίου πληγὴν θεραπεύσεις ἀργυρῷ δακτυλίῳ τὸν τόπον σφραγίζων. In a similar manner, modern Greeks believe that a certain type of ring, known as ματσστάτης, would help stop a hemorrhage. Cf. Aristophanes, *Plutus* 883, where Dikaios tells the Sykophant: "I fear you not. I wear an antidote, a ring Eudemos sold me for a drachma." Lucian, *Philopseud.* 17. Also see F. H. Marshall, *JHS.* xxiv, 1904, pp. 332-335.

<sup>14</sup> Aristophanes, *Clouds*, 332, meaning: "lazy long-haired fop with rings and natty nails," according to Liddell and Scott.

<sup>15</sup> Aristophanes, *Plutus* 883 ff.; *Thesmophoriaz.* 425.

<sup>16</sup> Herodotus iii, 41-43.

<sup>17</sup> F. H. Marshall, *Catalogue of the Finger Rings, Greek, Etruscan and Roman in the Department of Antiquities, British Museum* 1907, pp. xlviii and 31, no. 188.

<sup>18</sup> Swindler, *op. cit.*, pl. vi. Pfuhl, *op. cit.*, figs. 480-483. F. R. Grace, *Archaic Sculpture in Boeotia* 1939, figs. 23, 29, etc.

<sup>19</sup> G. M. A. Richter, *The Sculpture and Sculptors of the Greeks* 1929, figs. 262 and 263; Ch. Picard, *Manuel d'Archéologie Grecque, La Sculpture* i, 1935, pl. iii. The ornaments engraved on the chiton of the woman from Auxerre should be especially noted.

<sup>20</sup> Swindler, *op. cit.*, fig. 200; Pfuhl, *op. cit.*, iii, fig. 17.



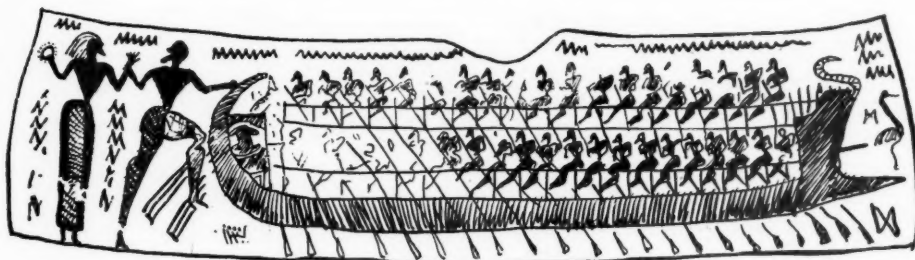


FIG. 6. — FROM AN ATTIC GEOMETRIC VASE (PFUHL, *MuZ.* III, FIG. 15)

illustrated in our fig. 6,<sup>21</sup> we find excellent parallels for this feature. A good many terracotta figurines of later Geometric times are given similar long necks.<sup>22</sup> On the few Geometric seals that have survived, men are shown with exceptionally long necks.<sup>23</sup> A running man on an Archaic scaraboid, illustrated by Furtwaengler, still has a long neck, but the length is approaching normalcy.<sup>24</sup> The same could be said for Herakles on the Nessos amphora. Long necks are characteristic of a group of Geometric statuettes discovered in Northern Greece and at Delphi, Kardhitza and Thermos.<sup>25</sup> The long neck is also a prominent feature of the later Apollo of the Tyszkiewicz Collection, now in Boston. In the statuette from Kardhitza we also find the coiled belt worn by our bearded man, and the bulging muscles of the legs. Miss Lamb has dated this statuette in the early years of the seventh century B.C. Our seal must belong to that century also. The shape of the bezel and the lack of a dotted border, so typical of gems of the Archaic period,<sup>26</sup> would also indicate this early date. The use of the wheel in the engraving would perhaps point to a somewhat later date than that of the Kardhitza statuette, since it is generally accepted that the wheel was not in use in the eighth and early seventh centuries. The middle of the seventh century is the most probable date for the design, and consequently for the signet-ring in the City Art Museum of St. Louis.

The side view of the man, so expertly drawn, and the liveliness of his movement might perhaps be conceived as features belonging to a later age. We must remember, however, that the compositions carved on Archaic gems are full of movement; that the rendering of the human form on Protocorinthian vases attains great excellence in an early era; that the animals carved on Melian gems are full of life and vigor. The miniaturists of late Geometric and Early Archaic times had indeed attained great excellence in the rendering of form, even superior to that possessed by monumental painters. Perhaps this was due to the influence which Minoan-Mycenaean prototypes exercised on their art.<sup>27</sup> That the design was plated in gold cannot be

<sup>21</sup> From Pfuhl, *op. cit.* iii, fig. 15.

<sup>22</sup> Mylonas-Kourouniotes, *AJ.A.* xxxvii, 1933, p. 280 and fig. 10, upper row.

<sup>23</sup> Casson, *op. cit.*, fig. 17, a 1 and 2, b 2.

<sup>24</sup> A. Furtwaengler, *Die antiken Gemmen* 1900, pl. vi, 38.

<sup>25</sup> W. Lamb, *Greek and Roman Bronzes*, 1929, p. 43, pl. xvii. For the Apollo Tyszkiewicz see *MonPiot.* ii, p. 137, pl. xv.

<sup>26</sup> Furtwaengler, *op. cit.*, pls. vi, vii; H. B. Walters, *The Art of the Greeks*, 1906, pls. lxxxix and xc.

<sup>27</sup> That Minoan prototypes were used throughout the historic period is indicated by a ring found at Cana and discussed by Sir Arthur Evans, *op. cit.* iii, pp. 125-126 and figs. 79-80. The Hellenistic engraver of the Cana ring, misinterpreting his prototype, produced a very amusing design.



used against an early date, because gold plating was practiced in Greece long before the seventh century. Minoan-Mycenaean artists knew the art of plating, as is proved by the famous silver rhyton from Mycenae, by the plated bronze wires used for hair, discovered at Knossos by Sir Arthur Evans, by a bronze dagger with plated hilt from the Mycenaean shaft graves, and by a plated bronze ring found at Ialysos.<sup>28</sup> Some silver rings of the sixth century, now in the British Museum, are plated with gold,<sup>29</sup> and this proves that the art of plating was revived in early historic times.

The signet-ring in St. Louis is not Mycenaean, but belongs to the middle of the seventh century B.C. Its importance and interest is not diminished by this fact; it is rather increased, because we have many wonderful examples of Minoan-Mycenaean signet-rings, but few belonging to the early years of the historic era of Greece. As noted above, from the seventh century we have the Ionic silver rings. Our example does not belong with that group. It is probable that it was made in Northern Greece, as the details of its design present close similarities to contemporary statuettes produced in that district. Consequently, it could be accepted as one of the earliest examples of signet-rings produced on the mainland of Greece in historic times.

We may now attempt to interpret the scene engraved on the bezel. There can be no doubt that it illustrates one of the most important acts in marriage festivities held in ancient Greece. These festivities actually occupied three days, during which the "contract-marriage" was elaborately concluded. To the ancient Greek marriage was a contract between a man and a woman and their respective families, and was not consummated after a religious ceremony.<sup>30</sup> During the second day the main event, the γάμοι, was celebrated.<sup>31</sup> The bride was elaborately dressed and decorated by a "specialist," the νυμφεύτρια or γαμοστόλος, who stood by her side throughout the day. She was covered with a bridal veil, wore the nuptial coronet or στεφάνη around her elaborately dressed hair, and a special kind of sandals called νυμφίδες.<sup>32</sup> After the sacrifice to the θεοὶ γαμήλιοι, a great banquet, the θοῖνη γαμική, was given in

<sup>28</sup> Evans, *op. cit.* iii, 89, 130, 432; Marshall, *op. cit.*, p. 193, no. 1218.

<sup>29</sup> Marshall, *op. cit.*, p. 56, nos. 22, 28, 32.

<sup>30</sup> Cf. Walter Miller, *Greece and the Greeks*, 1941, pp. 69-72; Pernice, *Griech. u. röm. Privatleben*, pp. 50 ff., where a good bibliography is found; *DS. s.v. Matrimonium*; A. Brueckner, "Athenische Hochzeitsgeschenke," *AM.* xxxii, 1907, pp. 79-122; Samter, "Hochzeitsbrauche," *NJ. fuer Kl. Phil.* xix, 1907, pp. 131-142.

<sup>31</sup> Pollux, *Onomastikon*, 39: προαύλια δὲ ἢ πρὸ τῶν γάμων ἡμέρα καὶ ἐπαύλια ἢ μετ' αὐτήν. The first day was spent in preparation. The father of the bride offered a sacrifice, and the bride dedicated her dolls, and toys and a lock of her hair to Artemis. During the ἐπαύλια, or the day after the actual marriage, friends and relatives of the bride visited her in her new home and brought her gifts. For an excellent discussion of the ἐπαύλια see Deubner, *JdI.* 1900, pp. 144-154, and Brueckner, *op. cit.* pp. 91 ff. See also the epinetron from Eretria in 'Ef. 1897, pl. 10, 2, and the lebes gamikos in the National Museum at Athens, 1681, illustrated by Brueckner, *op. cit.*, pl. viii. (For lebetes in general, Robinson, *AJA.* xl, 1936, pp. 507-519.)

<sup>32</sup> Pollux iii, 41; Hesychius, s.v. νυμφεύτρια, γαμοτελεῖν, νυμφίδες. Pollux iii, 43, enumerates the δῶδες νυμφικαί, στεφάνος καὶ στολή as the necessary accessories of the wedding. It may be interesting to note that in a modern Greek wedding wax tapers have taken the place of torches, and that the stephane is a most essential element in the ceremony. Both the bride and the groom must wear a stephane. We have numerous representations on red-figured vases of the bride in the midst of her friends being decorated for the occasion; see for example the British Museum pyxis illustrated by Dumont-Chaplain, *Céram. de la Grèce propre*, pl. ix, and the lebetes in the Metropolitan Museum, G. M. A. Richter-L. F. Hall, *Red-Figured Athenian Vases* 1936, pp. 181-182 and pls. 146-147, etc.



the home of the bride. Exceptionally in that banquet women were allowed to be present, but they were seated in a separate corner with the veiled bride in their midst.<sup>33</sup> The banquet was followed by the "ἀνακαλυπτήρια," when the bride removed her veil from her face and received from the groom the "ἀνακαλυπτήρια δῶρα."<sup>34</sup> The groom then grasped the bride by the wrist, "χεῖρ' ἐπὶ καρπῶ," and this was the final act of the marriage. The gesture marked the sealing of the "contract," and symbolized the passing of the bride into the complete possession of the groom.<sup>35</sup> Holding her by the wrist the groom led his bride to the bridal carriage, the "κλινίς,"<sup>36</sup> and the brilliant "πομπή," or the "fetching home," was on its way.<sup>37</sup>

There can be no doubt that the woman on the St. Louis seal is a bride. Her stephane, the elaborate ornaments suspended from her waist, her peplos thrown behind her head, can be explained if we see in her a bride, who has removed the veil from her face. Incidentally, the globular ornaments used for her decoration remind us of the "balls" painted on top of a chest brought to Aphrodite-bride, represented on a red-figured pyxis in the Metropolitan Museum.<sup>38</sup> Perhaps those balls, too, were to be used for the decoration of the bride. Our bearded man is the bridegroom, who, following the ἀνακαλυπτήρια, has taken possession of his bride by grasping her wrist.

<sup>33</sup> Lucian, *Convivium* 8, describes the arrangements of such a bridal banquet. For the appearance of the bride he states that she was πάνυ ἀκριβῶς ἐγκεκαλυμμένη. Sesame cakes were given to the guests and the wedding cake was made of sesame seed and honey, the former was symbolic of fertility.

<sup>34</sup> Thus Pollux iii, 36: τὰ δὲ παρὰ τοῦ ἀνδρὸς διδόμενα ἔδνα καὶ ὀπτήρια καὶ ἀνακαλυπτήρια. So Bekker, *Anecd. Gr.* i, 200, 6: ἀνακαλυπτήρια δῶρα διδόμενα ταῖς νύμφαις, ὅταν πρῶτον ἀνακαλύπτωνται ἐν τῇ ἐστίασει τῶν γάμων, τοῖς ἀνδράσι καὶ τοῖς ἐστιωμένοις ὀρώμεναι. Gulick, *The Life of the Ancient Greeks* 1902, p. 124, states that the gifts given to the bride on the day of the ἐπαύλια were the ἀνακαλυπτήρια δῶρα. However, the majority of ancient authors agree that such were the gifts given to the bride after the banquet. See also Pollux ii, 59: ὀπτήρια. Miller, *op. cit.*, p. 72, following Hesychios ἀνακαλυπτήριον, ὅτε τὴν νύμφην πρῶτον ἐξάγουσι τῇ τρίτῃ ἡμέρᾳ, believes that the "unveiling" occurred the day after the γάμοι, or during the ἐπαύλια. However, as we can see from numerous representations of the bridal πομπή, the bride was "unveiled" after the banquet and before the party started for the house of the groom.

<sup>35</sup> Brueckner, *op. cit.*, p. 81. We may recall the "ὑπὸ χεῖρα ποιείσθαι" = to bring under one's power (Liddell and Scott). This could be compared to the Roman "in manum convenire." During the service in a modern Greek wedding, the bride and groom have to lock together their little fingers. This is symbolic of their unbreakable union and is a gesture of mutual love, consent and respect. There can be no doubt that the locking of the fingers is a descendant of the χεῖρ' ἐπὶ καρπῶ, but both the gesture and its symbolism have deteriorated from a vigorous action indicating possession, to a sentimental hold standing for equality and for love.

<sup>36</sup> Pollux iii, 33: κλινίς, ἐφ' οὗ κάθηται ἡ νύμφη μετὰ τοῦ παρόχου τε καὶ τοῦ νυμφίου. Also Photios i, p. 246, ed. Naber. ζεῦγος ἡμιονικόν ἢ βοεικόν. Also "παραλαβόντες αὐτὴν (νύμφην) ἐκ τῆς πατρῶας Ἑστίας ἐπὶ τὴν ἀμαξαν ἀγούσιν εἰς Ἑστίαν τοῦ γαμοῦντος ἑσπέρας ἰκανῆς." Sometimes the bride was taken on foot to her new home and then she was known as "χαμαίπους," Pollux iii, 41. Such a κλινίς is painted on a fourth-century pyxis in the National Museum at Athens, 1630, illustrated by Brueckner, *op. cit.*, pl. v, 1.

<sup>37</sup> In *Iliad* xviii, 491-496, we have a description of such a ceremony:

"Under the gleaming of torches the bride from her chamber the party  
Up through the city were leading, and loud rose the hymn hymeneal;  
Young men whirled in an eddying dance, while the viols among them  
Sounded aloud, while flutes uplifted their notes; and the women  
All stood still at the porches and doorways, gazing in wonder."

(Translation by W. B. Smith and W. Miller, *The Iliad of Homer*, p. 404). Cf. Hesiod, *Shield of Herakles* 272 ff.

<sup>38</sup> Richter-Hall, *op. cit.*, pp. 202-203 and pl. 159.



The possessive quality of his gesture is apparent. So we have on the seal of the St. Louis ring the act of the "χεῖρ' ἐπὶ καρπῷ."

The various stages of the marriage festivities and the custom of holding the bride by the wrist, are well illustrated in vase-paintings. On a *loutrophoros* in Berlin, published by Herzog,<sup>39</sup> we see the bride, decorated and wearing her *stephane* and *peplos* — thrown behind her head — approached by the handsome groom who is extending his hand to grasp the bride's wrist. Behind her stands the *νυμφεύτρια*.

On the seal of our ring we have the next step in the order of things. The groom holds the bride by the wrist.

A red-figured *krater* discovered at Tanagra and published by Perdrizet,<sup>40</sup> will take us a step further. The departure of the bride from her home is represented on that *krater*. The mother of the bride with lighted torches leads the way by the family altar. The pair follows with the groom holding the bride by the wrist. The *νυμφεύτρια* and the best man or *πάροχος* and a boy flute-player close the procession. It is interesting to note that one of the men who watches the procession has thrown at the bride a pair of shoes. This, according to Perdrizet, is the final symbolic gesture of the parent of the bride, who thus absolves himself of all further responsibility for the girl.

On a *pyxis* from Eretria, now in the British Museum, illustrated by Brueckner, we have represented the departure of the bride from the "house altar." Again the groom is holding the bride by the wrist.<sup>41</sup> On a red-figured *kylix*, now in Boston, painted by Makron and made by Hieron, we have the representation of a famous and fateful *πομπή*. Alexander-Paris, holding Helen by the wrist, leads her away, perhaps to his boat which will take the place of the *κλινίς* in this instance. Helen, in bridal veil and wearing a *stephane*, is accompanied by Aphrodite in the rôle of the *νυμφεύτρια*, and by Peitho, a very essential member under the circumstances. The pair is preceded by Aeneias, who acts as the *νυμφαγωγός* and the *πάροχος*.<sup>42</sup> On a red-figured *pyxis* in the Louvre, we find the *πομπή* approaching the house of the pair. The groom, holding the bride by the wrist is leading her towards his parents who stand ready to welcome the pair.<sup>43</sup> This effort to symbolize possession I would like to read into the well-known group of the nude Aphrodite, Pan and Eros in the National Museum at Athens.<sup>44</sup> It seems that Pan is learning the hard way that it takes two to make a contract, for Aphrodite is threatening him with her sandal.

All these examples, and many others that we cannot discuss here, seem to indicate that the custom of holding the bride by the wrist, the *χεῖρ' ἐπὶ καρπῷ*, a gesture symbolic of the relations of the bride and the groom, and of the bride and her family, was an old and prevalent custom. Allusion to this we may find in the "ἀλόχου χεῖρα βαστάζων" of Euripides and even in the famous passage of *Creusa*: "λευκοῖς δ' ἔμφυς καρποῖς χειρῶν εἰς ἀντροῦ κοίτας . . . ἄγες."<sup>45</sup>

The custom did not originate in the years in which our ring was made, but seems to have been of greater antiquity. On the Attic Geometric composition illustrated in

<sup>39</sup> *AZ.* 1882, p. 131, pl. v.

<sup>40</sup> *Εφ.* 1905, pp. 209-214 and pl. 6-7 (now in the National Museum at Athens).

<sup>41</sup> Brueckner, *op. cit.*, p. 80 and fig. 1.

<sup>42</sup> J. C. Hoppin, *A Handbook of Attic Red-Figured Vases* ii, p. 52, fig. 53.

<sup>43</sup> Pfuhl, *op. cit.*, iii, fig. 580.

<sup>44</sup> *BCH.* xxx, 1906, pp. 610-631, pl. 14.

<sup>45</sup> *Alceste* 917 and *Ion* 891 ff.



our figure 6, I believe that we have an older representation of the "χείρ' ἐπὶ καρπῷ." A groom, in this instance perhaps Theseus, holds his bride, perhaps Ariadne, by the wrist and leads her to his boat, that will take the place of the κλινὴς of the regular πομπή. The wreath held by the bride perhaps stands for the stephane which every bride had to wear. If this interpretation is correct, then we find the custom in the late Geometric period. I believe, however, that we can trace it further back, to Minoan-Mycenaean times.

On a gold signet-ring from Candia, fig. 7, published by Sir Arthur Evans, I would like to see the representation of our custom.<sup>46</sup> A male figure with one hand holding

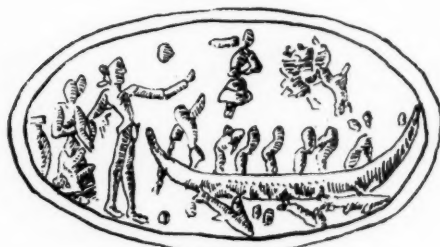


FIG. 7.—DESIGN ON A SIGNET-RING FROM CANEA (EVANS, *P.M.* IV, FIG. 923)

the wrist of "his flounced consort" stands in front of a "baetylic shrine" and on the shore, from which a boat is about to be pushed off. Above the "bark with six rowers" is represented a woman and behind her a tree, that have been interpreted by Sir Arthur as "the Goddess and her tree behind her." She raises her hand in a gesture of farewell to which the man responds by a similar gesture. Sir Arthur

takes this composition to be a "variant version of the scenes of the departure of the Goddess over sea, together with her shrine and sacred tree." There is nothing, however, to indicate that the woman is a Goddess hovering over the bark. Most probably she is a mere mortal standing on the shore of a cove from which a "bridal" boat is ready to depart, the shore indicated by a tree. The higher level on which the woman is placed will merely indicate that she is to be conceived as standing on the far side of the cove beyond the boat, a rendering typical in a composition in which the primitive vertical perspective has been used. And so we may see in the composition of the signet-ring from Candia a groom taking aboard his bride and waving farewell to the mother of the bride, perhaps, who stands on the shore.

The same event, the "χείρ' ἐπὶ καρπῷ," is represented on a gold signet-ring from Tiryns,<sup>47</sup> illustrated in our fig. 8. Sir Arthur Evans and Dr. Karo have pointed out that on this ring we actually have three scenes. The one to the right, with a man and a woman in a building, has been explained as a wife and husband embracing. It seems to me that we have again a marriage contract sealed by the holding of the wrist. The second is a farewell scene, but I believe that in it the bride bids farewell to her parent, while the groom is waiting for her on board. In the third scene we have bride and bridegroom in a cabin placed in the center of the boat. Incidentally, a comparison of the flounced skirts of the Minoan ladies with the chiton worn by our bride will indicate the difference that exists between Minoan and Early Archaic dress styles.

These two examples from Crete and the mainland seem to indicate that the custom "χείρ' ἐπὶ καρπῷ" is an old and venerable custom going back to Minoan-

<sup>46</sup> Evans, *op. cit.* iv, p. 954, fig. 923; ii, p. 250, fig. 147.

<sup>47</sup> *Ibid.* iv, p. 954, fig. 926; Karo, *Arch. Assoc.*, 1916, p. 147, fig. 4.



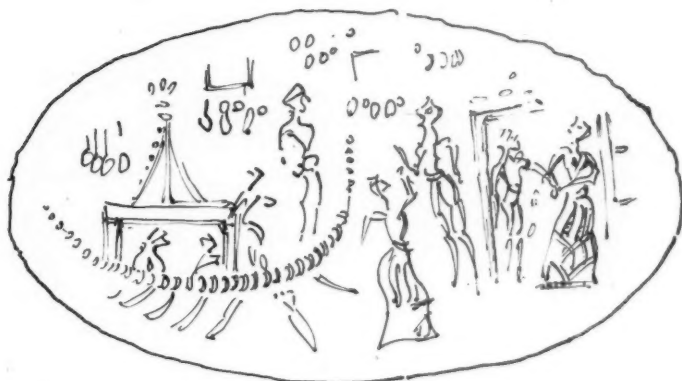


FIG. 8.—DESIGN ON A SIGNET-RING FROM TIRYNS (EVANS, *PM.* IV, FIG. 926)

Mycenaean days. Perhaps we may note that when Odysseus returned Chryseis to her father Chrysis, he “πατρὶ φίλῳ ἐν χερσὶ τίθει.” In the latest and most satisfactory translation of the *Iliad* by Professors Smith and Miller the line is rendered: “Odysseus yielded her into the arms of her father dear.”<sup>48</sup> I believe that the meaning of the passage goes beyond the sentiment of the translation. The placing of Chryseis in the hands of her father indicated the change of ownership and the full repudiation of the claims of Agamemnon and the Greeks on the girl. The same should be construed in the story of the taking of Briseis from Achilles by Agamemnon, told by Thetis to Hephaestus. “τὴν ἄψ ἐκ χειρῶν ἔλετο κλείων Ἀγαμέμνων,” states Thetis. “Out of his (Achilles’) arms hath the lord Agamemnon forcibly taken,” is the best available translation.<sup>49</sup> Again, I believe, the “ἐκ χειρῶν” indicates the complete change of ownership.

From our discussion thus far it has become clear, we believe, that on the signet-ring in the City Art Museum of St. Louis, dating from the middle of the seventh century, we have represented one of the oldest customs of Greece: the custom of taking possession of the bride. Will it prove feasible to go a step further and identify the couple? Of course, we can always assume that a groom, happy in his new association, wanted to perpetuate the memory of his wedding and had the seal engraved. This would not be unusual in our days, but I am afraid that such sentimentality was rather rare if not entirely unknown in the ancient Greek world. However, such a possibility cannot be entirely excluded. Yet it may be profitable to turn to another direction and seek other parallels.

We may assume that Gods and not mortals are represented on the seal, an assumption that is not entirely improbable. The type of the bearded man was used for the rendering of Zeus and Poseidon especially. Of the two Gods Zeus will fit better the rôle of the special groom, because Zeus is represented in a similar situation in art. In the well-known metope from temple E or R of Selinus, Zeus, seated on a rock, is gazing intently at Hera who has removed her bridal veil from her face. With his

<sup>48</sup> *Iliad* i, 441; W. B. Smith and W. Miller, *op. cit.*, p. 21.

<sup>49</sup> *Iliad* xviii, 445; Smith-Miller, *op. cit.*, p. 403.



raised right hand he holds the left wrist of his bride.<sup>50</sup> It is usually assumed that Zeus is drawing Hera toward him, but it seems to me that in this instance too we have the "ἀνακαλυπτῆρια" followed by the symbolic grasp, the χεῖρ' ἐπὶ καρπῶ, that would indicate Zeus' possession of Hera. Again, in the well-known painting from the "House of the Tragic Poet,"<sup>51</sup> we find Zeus seated on a rocky ledge holding by the wrist with his right hand his dazzling bride, still wearing her staphane and veil. Certainly this copy of a Hellenistic original is another instance of the last act of the wedding festivity, the ἀνακαλυπτῆρια, followed by the symbolic grasp. With good reason, therefore, these compositions and others similar to them are accepted as representing the "sacred marriage," the "ἱερὸς γάμος" of Zeus and Hera.<sup>52</sup>

From this point it is but a short step to suggest that our bearded figure is Zeus holding Hera by the wrist in a new example of the "hieros gamos." The raised hand of the woman may be explained as a gesture of surprise, of salute or even of adoration, but this hardly agrees with the dignified manner expected from a bride at that final moment. It may be more accurate to assume that the raised hand has removed the bridal veil and to see in the gesture a suggestion of the "ἀνακαλυπτῆρια." Hera so raises her hand in the composition of the metope from Selinus. The inability of the artist to render the drawn veil across the background will account for the translation of the gesture — the same inability that forced him to represent the man with only a chiton, instead of the voluminous draperies worn by grooms. We must, of course, remember that the marriage of Zeus and Hera formed the prototype followed in each case by couples to be married,<sup>53</sup> and that our composition may be a representation of such a marriage of two mortals, or even of a hero and his bride, but because of the sentimentality involved, we would prefer to see in our composition the marriage of Zeus and Hera.

Such a sacred composition would not be unusual or sacrilegious. It would form a revival of an old practice, because it should be remembered that most compositions on Minoan-Mycenaean signet-rings are religious in character. As those older signet-rings "stood in a peculiar relation to their owners, a relation that extended beyond the grave,"<sup>54</sup> so our ring might have served a special function beyond that of a seal. We have seen above how signet-rings, in the historic era, served as amulets and even for the cure of spider-bites. Our ring, with its sacred composition, might have been used with a similar apotropaic end in view. In conclusion, we may repeat that it is impossible to identify definitely the characters represented on the seal. Only as a suggestion have we offered the identification of the bearded man as Zeus and of the woman as Hera. But it can be considered as definitely established that on the bezel of the St. Louis ring we have represented the final act of an ancient marriage ceremony.

The bronze signet-ring in the City Art Museum of St. Louis, is, indeed, one of

<sup>50</sup> Brunn-Bruckmann, *Denkm. der gr. und roem. Sculpt.*, pl. 290, 1; Richter, *op. cit.*, fig. 410; O. Benndorf, *Die Metopen von Selinunt* 1873, pl. 8.

<sup>51</sup> Herrmann, *Denk. d. Malerei* i, pl. II; G. Rodenwaldt, *Die Komposition der pompej. Wandgemaelde* 1909, pp. 203-206.

<sup>52</sup> Cf. A. B. Cook, *Zeus* iii, Part II, pp. 1025-1065, where complete notes and bibliography.

<sup>53</sup> *Ibid.*, p. 1060. Cf. Dion. Hal., *Ars Rhetor.* 2, 2, and Diod. 5, 73.

<sup>54</sup> Evans, *op. cit.* iv, p. 513.



those small, but fascinating objects which have come down to us from the ancient world. We do not know its pedigree, but we may feel sure of its place in the long chain of art objects produced by ancient miniaturists — a chain, whose links were fashioned by the gem-engravers of Crete, the carvers and even the die-makers of historic Greece, and the cameo workers of Imperial Rome. Like its most famous ancestors, the signet-rings of the Minoan-Mycenaean world, the St. Louis ring not only illustrates the ability of the engravers of the seventh century, but also reveals an intimate aspect of the life of the people of Greece.

WASHINGTON UNIVERSITY,  
ST. LOUIS, MO.

GEORGE E. MYLONAS



## HORSEMEN FROM SARDIS

Οὐ μὲν δὴ κείνόν γε μένος καὶ ἀγήνορα θυμόν  
τοῖον ἔμεῦ προτέρων πείθομαι, οἳ μιν ἶδον  
Λυδῶν ἵππομάχων πυκίνας κλονέοντα φάλαγγας  
Ἑρμιον ἄμ πεδίον, φῶτα φερεμμελίην.

(E. Diehl, *Anthologia Lyrica* i, 1, p. 44, No. 13, Mimnermus).

Lydian cavalry—not in battle but on parade—may well be the subject of a remarkable vase which American excavators found in Sardis in 1914.

The description given by Dean George H. Chase in the inventory of pottery under No. P.280 E<sup>1</sup> reads as follows:

"Twelve fragments of a very large vase. The two fragments containing the horsemen are the most complete. Height 8 cm., Length 11 cm. Dark gray clay, slip of buff clay. The figures apparently modelled separately in gray clay and applied to the shell, after which the clay slip was applied to the whole. To the figures and to some parts of the surface a hard yellow-white slip of good quality was applied. The decoration is in lustrous black-red glaze.

"The (ornamental) decoration around the figures (of horsemen) consists of double chevrons pointing upwards where the span allows them, and elsewhere of zigzags. Below the base line was a broad band of white slip painted with a guilloche; and below this came a broad band of black-red ('streaked') technique, and then a broad band of white slip."

The fragments are now in the Metropolitan Museum, New York.<sup>2</sup> Some of them have been joined and their number thus reduced to eight (figs. 1-8).

Fig. 1. Metropolitan Museum No. 26.199. 21 A. Two fragments joined together. L. 11.6 cm., H. 8.2 cm. Horse and rider. Neck and legs of the horse, head of rider missing. The rider is dressed in a short, belted checkered chiton. His left foot rests on the flank, his right foot hangs below the abdomen of the horse.

Fig. 2. Metropolitan Museum No. 26.199. 21 B. L. 8.6 cm. H. 9 cm. Breast, shoulder, forelegs of a horse, left leg of a rider.

Fig. 3. Metropolitan Museum No. 26.199. 21 C. Three fragments glued together. L. 15 cm. H. 8.5 cm. Part of foreleg, fetlock and hoofs of hindlegs of the horse, right foot of the rider. Below, guilloche, brown band.

Fig. 4. Metropolitan Museum No. 26.199. 21 D. L. 8 cm., H. 6 cm. Part of tail? or foreleg? Below, guilloche, brown band, white band.

Fig. 5. Metropolitan Museum No. 26.199. 21 F. Two fragments. L. 6.5 cm., H. 5.2 cm. Part of tail? Superimposed "zigzag" lines, two "double-chevrons." Below, guilloche.

Fig. 6. Metropolitan Museum No. 26.199. 21 G. L. 4 cm., H. 4.1 cm. Part of horse's tail. "Zigzags" above and below. On the right, apex on another ornament. It cannot be a chevron and, to judge from fig. 2, it cannot belong to the figures, either. Perhaps part of a rhomboid.

<sup>1</sup> I am much indebted to Dean Chase for permitting me to join him in the work on the publication of the vases from Sardis and for placing at my disposal his photographs and his file of the Sardis pottery.

<sup>2</sup> Miss Richter, Miss Alexander and Miss Milne have most generously given of their time to facilitate my study of the Sardis pottery. To the joint efforts of Miss Alexander and Mr. L. Hall I owe the drawing for fig. 9.

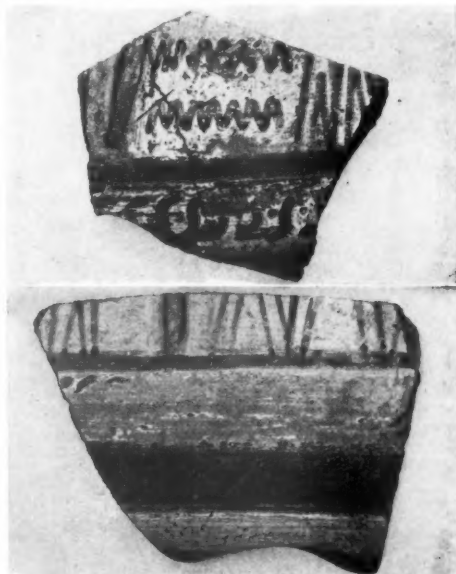




FIG. 1.—PAINTED RELIEF VASE FROM SARDIS. METROPOLITAN MUSEUM 26.199.21. FRAGMENT A



FIG. 2.—PAINTED RELIEF VASE FROM SARDIS. METROPOLITAN MUSEUM. FRAGMENT B



FIGS. 4 and 5.—PAINTED RELIEF VASE FROM SARDIS. METROPOLITAN MUSEUM. FRAGMENTS D, F

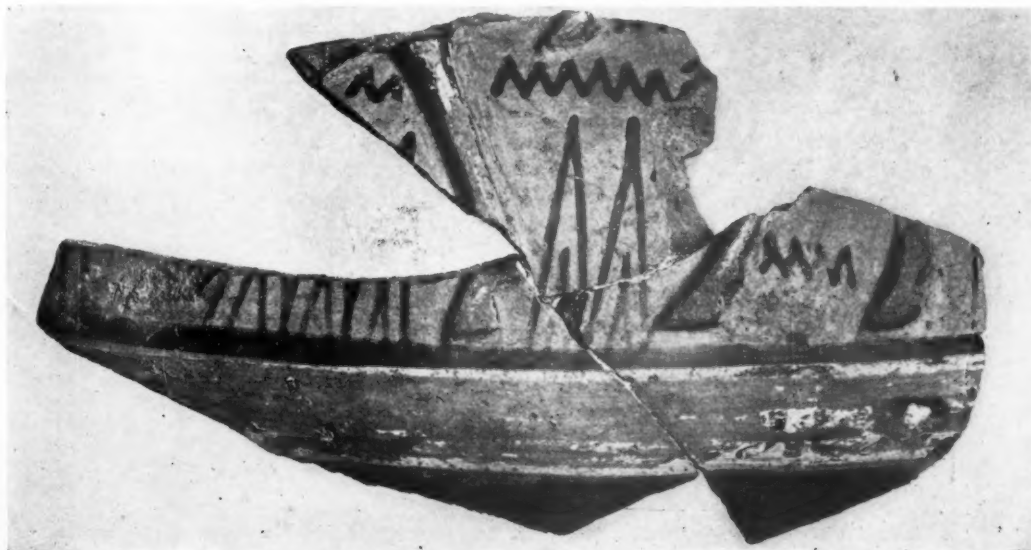


FIG. 3.—PAINTED RELIEF VASE FROM SARDIS. METROPOLITAN MUSEUM, FRAGMENT C





FIGS. 6-8.—PAINTED RELIEF VASE FROM SARDIS. METROPOLITAN MUSEUM. FRAGMENTS G, H AND E

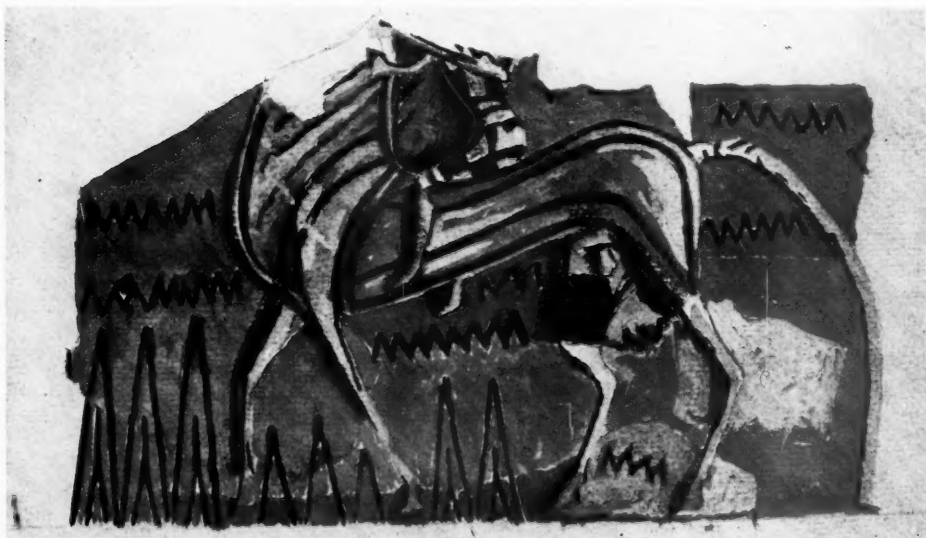


FIG. 10.—TENTATIVE RECONSTRUCTION OF THE FIGURE OF A HORSEMAN. PAINTED RELIEF VASE FROM SARDIS



FIG. 11.—LATE GEOMETRIC ATTIC AMPHORA. MUSEUM OF FINE ARTS, BOSTON, 03.782



Fig. 7. Metropolitan Museum No. 26.199. 21 H. L. 4 cm., H. 9 cm. Part of hindleg (hock). Parts of three "double-chevrons."

Fig. 8. Metropolitan Museum No. 26.199. 21 E. L. 5.5 cm., H. 7.7 cm. Surface decoration: part of a panel decorated with "zigzags" over thin clay slip; then the same pattern over yellow-white slip. The ornament in relief, consisting of a disk and a crown-like design continued a plastic, painted attachment, which is broken off. This may have been a small handle, or, more likely an animal head. It is not clear in which way the fragment should be viewed: it could be the crown over an animal head or, conversely, the collar and pendant at the neck of a plastic head. The profile of this fragment is less curved than those of the frieze fragments, but it is unquestionably in the same technique and by the same hand. If this fragment belongs, then the vase must have been one of those bizarre experiments in the fusion of painted and plastic ornament, which are characteristic for the formative period of Greek archaic art.<sup>3</sup> Indeed, the frieze of the Sardis vase would alone be sufficient to illustrate this tendency. Although as a relief it takes its place with the relief pithoi of Crete, the Cyclades, Rhodes, Boeotia and Asia Minor,<sup>4</sup> it is unique in relying primarily upon painting for its effect. Painted relief plaques of the seventh century show a similar technique, but I know of no other seventh-century vase with a similar painted frieze in relief.

To judge from the curvature of the fragments, the vase must have had a diameter of about 30 cms.<sup>5</sup> The figurative frieze was at least 13 cm. high, and, as Miss Richter has observed, its base-line appears to coincide with the widest part of the vase. The fragments preserved belong to at least three different horsemen; it is possible that there were six, three to each side, all going to the left. The fragment (fig. 8) suggests that the frieze may have been divided by (two?) panels.

The vase was large and fairly globular (fig. 9). It may have been a large amphora<sup>6</sup> or a crater.

From the fragments it is possible to reconstruct the figure of a horseman<sup>6a</sup> up to the neck of the horse and the shoulders of the horseman (fig. 10). The horses are heavy-chested and broad-necked, embodying perhaps the features of an "Asiatic" breed,<sup>7</sup> but their legs are long and thin and seem to dangle from the trunk. The mane is rendered in thin, wavy lines. Shoulder and foreleg are enclosed by one set of broadly painted double outlines; trunk and thighs by another. From knee downward a sim-

<sup>3</sup> For instance, the griffin heads on a Cretan vase. D. Levi, *Hesperia* xiv, 1945, pp. 22 f., pl. 11, 2. *Potnia theron* with plastic head and painted body, Levi, pl. 12. Cf. the Attic terracotta plaque, D. Burr, *Hesperia* ii, 1933, pp. 604 ff., fig. 72.

<sup>4</sup> F. Courby, *Les vases grecs à reliefs*, Paris, 1922, pp. 40 ff.; R. Demangel, *La frise ionique*, Paris, 1933, pp. 135 f., 155 ff.; R. Hampe, *Frühe griechische Sagenbilder*, Athens, 1936, pp. 56 f.; F. R. Grace, *Archaic Sculpture in Boeotia*, Cambridge, Mass., 1939, pp. 16 ff.; D. Levi, *op. cit.*, pp. 13 and 30 f., pls. 30-32.

<sup>5</sup> I owe this information to Miss Richter and Miss Alexander.

<sup>6</sup> Various fragments of large amphorae and other globular vases occur among the Sardis fragments. Cf. T. L. Shear, *AJA.* xxvi, 1922, pp. 395 f., fig. 4. The position of the Sardis frieze may have resembled that on the Melian vase, fig. 15, or on the Cycladic amphorae, *Delos* xvii, pls. 8-9. Craters, such as Samian: *AM.* lviii, 1933, pp. 73 ff., fig. 31.

<sup>6a</sup> I have not been able to secure a satisfactory drawing, but an old watercolor may convey an approximate idea. Apart from mistakes in proportions of the neck and the trunk, the hindlegs are incorrectly drawn. The right hindleg was almost straight (fig. 3), the left less bent than in our drawing (cf. figs. 7 and 3). The tail must have descended almost vertically with a slight turn toward the hoof of the left hindleg (fig. 5). The correct position of the hoof of the right foreleg is indicated by the broken area in the left corner of fig. 3. All legs and the tail were outlined. The chevrons between the forelegs were double-chevrons and higher than in the drawing.

<sup>7</sup> S. D. Markman, *The Horse in Greek Art*, Baltimore, 1943, pp. 16 f. The horses of the "Hunting" frieze from Gordion seem to be of the same type (G. Koerte, *Gordion*, Berlin, 1904, fig. 141).



ple outline runs along the edge of the relief. The tail curved in a wide arc and probably came down to the ground in a fairly straight line.

The little riders perch somewhat insecurely on the very edge of the horse's back, as if they had no weight. The position of the legs might suggest that they are about to slide off, while the gesture of hands, with which they presumably held the reins, might be interpreted as the representation of a "left turn." There seems to be no trace of weapons.

Even at first glance it is clear that the vase was made in the seventh century B.C., but it is not easy to find exact parallels. The technique of broad outline painting over a yellowish slip indicates a general affinity with Eastern Greek and Greek island wares, but an examination of various vases and fragments in the Boston Museum has failed to disclose any real clue. The vase does not belong to one of the known schools. On the other hand, the hard "yellow-white" slip<sup>8</sup> is different from the slips used on established native wares. The glaze might well be Sardinian. The subject matter is unique among Sardis vases. Either the vase was made by a Greek potter working in Sardis, or else it is a product of an unknown Ionian workshop of one of the coastal cities of Asia Minor.

The style of the Sardis fragments exhibits an interesting mixture of advanced and backward elements. The guilloche under the frieze is commonplace in Orientalizing wares of the seventh century<sup>9</sup> and is found in this position even on terracotta friezes of the sixth century.<sup>10</sup> But the use of simple "zigzags" and "double-chevrons" as the only filling ornaments is a very retrograde device compared with the rosettes, circles, and stylized floral pattern of Protocorinthian, Laconian, later Proto-Attic, Cycladic, Cretan and Eastern Greek Orientalizing Wares.<sup>11</sup> The rendering of the horsemen with their narrow waists, frontal view of chest and shoulders, and thin snaky arms still betrays the Geometric tradition. On the other hand, the long, slender trunks of the horses are designed in elegant curves, have weight and volume, and the rendering of the legs, especially of the bent forelegs, is more complex than that of a "Melian" vase (fig. 15). If the horsemen are reminiscent of the Early Orientalizing canon of the human figure, the horses are in the general style of outline drawings of Late Orientalizing vases, Rhodian, Samian, and Naucraticite.<sup>12</sup> There we find also the occasional use of drawn (rather than incised) double outlines, a device originally derived from the Orient.<sup>13</sup> True, one does not see very often a

<sup>8</sup> I have in my notes a reference to a vase, on which a train of warriors "like Pazarli and Alishar" is painted in brown on yellowish-white: *MDOG.* lxviii, May, 1940, pp. 56 f., fig. 14. This sounds like the technique of the Sardis vase, but I have not seen the vase with the warrior frieze.

<sup>9</sup> E.g. Rhodian, M. Robertson, *JHS.* lx, 1940, pp. 8 ff., pls. 1 and 3, and the Euphorbos plate, Pfuhl, *MuZ.* fig. 117; Cycladic: *Delos* xvii, pl. 8; Cretan pithos; D. Levi, *op. cit.* p. 31, pl. 31, 6; Argivo-Corinthian bronzes: H. Payne, *Perachora*, Oxford, 1940, pp. 147 f., pl. 49, 4-5.

<sup>10</sup> E. D. Van Buren, *Figurative Revetments in Etruria and Latium*, London, 1921, pp. 59 ff., pl. 24, 1.

<sup>11</sup> Triangles and "zigzags" are used as filling ornament with the horsemen on the early Proto-Attic amphora in New York, dated by J. M. Cook in the period 710-680 B.C.: *BSA.* xxxv, 1934-5, pp. 179 f., pl. 7. "Zigzags," but with Orientalizing ornament are used on the Menelas stand, on the New York Netos amphora, about mid-seventh century (*CVA.* Berlin I, pls. 31-33). On Samian vases "zigzags" and chevrons occur with Geometric horses (*AM.* liv, 1929, p. 17, Beil. 8, 1-3). Cycladic: *Délos* xv, pls. 21 f., 24, 55. The Melian vase, our fig. 15, combines "zigzags" and floral ornament.

<sup>12</sup> E.g. Pfuhl, *MuZ.* fig. 111.

<sup>13</sup> E. Kunze, *Kretische Bronzereliefs*, 1931, pp. 157 f.; *Délos* xvii, pl. 8 (Cycladic); *AM.* liv, 1929, Beil. 2, 2 (Samian); *JHS.* xlv, 1924, pp. 212, fig. 47 and pl. 8, 9 (Naucraticite).



double outline used to encircle the body, but one of the lost Sardian vases shows a dotted deer of general "Naukratite" appearance with its body drawn thus. The closest resemblance, however, to the use of broad double outlines is presented by the stags and lions of the painted terracotta slabs from Pazarli in Phrygia.<sup>14</sup> The place of the Sardian vase in the development of seventh-century art can be ascertained by comparing its horsemen to other horsemen of the Orientalizing era (figs. 11-18). The procession of horsemen is known to Greek Geometric art, Attic vase paintings being the most numerous and most impressive<sup>15</sup> (fig. 11). The subject is also known in Geometric wares of Eastern Greece.<sup>16</sup> A procession of armed horsemen appears on a vase of the Early Orientalizing period found in Ephesus.<sup>16a</sup> Usually, the horses are shown with all four feet on the ground and the impression given is that of a solemn walk.<sup>17</sup> During the seventh century, this Geometric "walking" type remains in great favor. In Protocorinthian as well as in Proto-Attic vase painting we can trace step by step the transformation of the Geometric equestrians. The lean and lively Geometric horses grow in size and weight and acquire flesh and blood; the wasp-waisted riders abandon their hectic gestures, become more solid and collected. In the revolutionary period of the mid-seventh century, the period of the first monumental stone sculptures and first large-scale polychrome paintings, a new "Daedalic" type of horsemen is established. Two different canons of proportions are employed in the pictures of equestrian parades. The first exhibits a fairly sturdy type of horse, and the riders, in consequence, appear fairly large. This is the type of the Proto-Attic Menelas stand, of the Cretan pithos from Lyttos (fig. 12), of a Spartan ivory and of the

<sup>14</sup> Hamit Z. Kosay, "Les Fouilles de Pazarli," *Türk Tarih Kurumu Yayınlarından* v. Seri, No. 4, Ankara 1941, pp. 16 f., pl. 27, 2-3. I owe this reference to Professor P. Jacobsthal. Remzi Oguz Arik, *A.A.* liv, 1939, p. 142, fig. 23.

<sup>15</sup> Our fig. 15 is No. 03.782, Boston (A. Fairbanks, *Cat. of Greek and Etruscan Vases*, No. 262, pl. 21). J. M. Cook, *op. cit.*, p. 183, calls it "still Geometric" and dates it shortly before 700 B.C. Other Attic examples of horsemen earlier than the mid-seventh century: British Museum: Lebes from Thebes: A. S. Murray, *JHS.* xix, 1899, p. 199, pl. 8 (Cook, p. 191, n. 4); New York: Cook, pp. 179 f., 213, pl. 47. ("710-680 B.C."); Berlin: *CVA.* I, p. 14, pl. 7, 2; Karlsruhe: Cook, pp. 175 f., *Jdl.* 1907, p. 99, fig. 12 ("710-680 B.C."); Berlin: *CVA.* I, p. 33, pl. 41, 3, 42, 4; Hymettus Amphora, Berlin: *CVA.* I, p. 34, pl. 44, 2 (Cook, p. 188, 216, "680-630 B.C."); Agora Museum: D. Burr, *Hesperia* ii, 1935, p. 210, 593, fig. 58; Menelas Stand, Berlin, *CVA.* I, pls. 31-33; Cook, p. 192. The "Cavalcade," "contemporary or nearly with the Nessus amphora" (Beazley) probably portrayed galloping horsemen. *Hesperia* xiii, 1944, p. 38; *Society of the Friends of the National Archaeological Museum of Athens 1934-5*, Athens, 1936, p. 11, No. 9, fig. 9a. It is often said that the procession of riders is Geometric; so far, I have seen only late Geometric examples. I suspect that stylistically this subject owes its rise to the early Orientalizing taste, the same taste that expressed itself in animal friezes. Individual figures or even pairs of riders inserted into other scenes are a different story. An interesting question, much discussed by earlier writers, is the possible sociological significance of these equestrian parades. Do they reflect the rising importance of the aristocratic knights? Cf. E. Petersen, *JOAI.* viii, 1905, pp. 70 ff.

<sup>16</sup> Chios: W. Lamb, *BSA.* xxxv, 1934-5, p. 158, pl. 35, 29.

<sup>16a</sup> J. Keil, *JOAI.* xxiii, 1926, Beiblatt, p. 255, fig. 45. The fragments seem to represent the same phase of development as Cook's "Middle Proto-Attic." First half of the seventh century.

<sup>17</sup> The discussion concerns only the "walking" type of horsemen. The prancing type is probably derived from Phoenician models. Cf. J. L. Myres, *JHS.* liii, 1933, p. 35, pl. 2 and fig. 2. Cretan adaptation: Kunze, *op. cit.*, pp. 208 f., pl. 16. Protocorinthian: the Pegasus on the lekythos in Boston, A. Fairbanks, *Catalogue*, No. 400, p. 151. The galloping type may be Assyrian. Protocorinthian: Payne, *NC.* pl. 1, 7. This is the scheme adopted for riders by Ionian terracotta sculptors of the sixth century. It is also found on late seventh-century relief pithoi. Levi, *op. cit.*, pl. 5, 1. Cycladic: *Délos* xvii, pls. 9 and 70. A fine Rhodian horse: *Délos* xvii, pl. 63, no. 39.





FIG. 12.—CRETAN RELIEF PITHOS. CANDIA MUSEUM. (AFTER *Hesperia* 1945)



FIG. 13.—BOEOTIAN RELIEF AMPHORA. MUSEUM OF FINE ARTS, BOSTON, 99.506



FIG. 14.—PAINTED PLATE. CANDIA MUSEUM. (AFTER PFUHL, *MuZ.*)



FIG. 15.—"MELIAN" AMPHORA. (AFTER PFUHL, *MuZ.*)



FIG. 17.—ETRUSCAN TERRACOTTA FRIEZE, FROM ROME. MUSEUM OF FINE ARTS, BOSTON. B 988



FIG. 18.—RHODIAN PLATE. BERLIN INV. 3724. (AFTER NEUGEBAUER, *Fuehrer, Antiquarium ii*)



FIG. 16.—SHERD FROM NAUKRATIS. BRITISH MUSEUM. (AFTER *JHS.* 1924)



Boeotian amphora in Boston (fig. 13).<sup>18</sup> The second type incorporates the most striking characteristics of Geometric horsemen and reshapes them according to the ideal of the "Daedalic" canon. The horses are enormously long-legged, the riders diminutive. The best known examples are the riders of the frieze from Prinia;<sup>19</sup> earlier perhaps is the Cretan plate from Praisos (fig. 14).<sup>20</sup> A "Melian" vase goes farthest in conscious calligraphic geometry (fig. 15).<sup>21</sup> An Eastern Greek example of the same type is represented by a Naucratis sherd (fig. 16).<sup>22</sup> I think that the greater differentiation in the anatomy (legs) of the horses shows the Sardian riders to be later than their counterparts on the Melian vase. The Cretan horseman of the Praisos plate may be contemporary with the Sardian riders, or slightly later. The fragment from Naucratis appears more advanced, as the foot of the rider, for instance, is clearly differentiated from the leg. The eager, sharp-nosed Boeotian horseman (fig. 13), whose body, like those of the Sardian riders is still partly frontal, represents the same stage of development as the Sardians. On both vases there are some Geometric survivals and a flavor of provincialism. In the use of filling ornament, the Melian vase comes closest; only its ladders of "zigzags" are strict and orderly where the Sardian ornaments are sloppy and loose.

All of these horsemen belong in the second half of the seventh century. The survival of the "elongated" type in Asia Minor is attested by the rider of a relief from the "Lion Tomb" in Xanthos.<sup>23</sup> In view of the very close relation of later Etruscan and Ionian terracotta friezes, it is possible that the Etruscan terracotta relief from Rome (fig. 17)<sup>24</sup> and the painting of the Tomba Campana in Veii<sup>25</sup> imitate Eastern Greek rather than mainland representations of horsemen. The later development of the "walking" type of equestrians in Eastern Greece is illustrated by a fragment from Larissa.<sup>26</sup> The larger, heavier forms correspond to the style of the Nessos painter in Attica; in Ionia, too, it appears, the subtlety of the "Daedalic" style was followed by grander concepts. The only other fairly early archaic example from the Eastern Greek area, is the curious riding figure on a Rhodian plate in Berlin (fig. 18).<sup>27</sup> The curve of the trunk of the horse, which can be observed on the Sardis vase, is tremendously exaggerated in the Rhodian picture. This may be an Eastern Greek

<sup>18</sup> Menelas Stand: *CVA*, Berlin I, pls. 31-33; J. M. Cook, p. 192. Lyttos: D. Levi, *op. cit.*, p. 31, pl. 31, 6; K. Friis-Johansen, *Les Vases sicyoniens*, Paris, 1923, pp. 121 f., fig. 111. Laconian ivory: Poulsen, *Orient*, fig. 122. Boeotian: Grace, *op. cit.*, fig. 10.

<sup>19</sup> Markman, *op. cit.*, pp. 45, 111, 152 f., fig. 21 (with references). R.J.H. Jenkins, *Daedalia*, Cambridge, 1936, p. 82 thought that the horsemen might date before the mid-seventh century, but they are usually placed later. I doubt, however, that they could be as late as 600 B.C.

<sup>20</sup> Fig. 14, after Pfuhl, *MuZ.* fig. 57. For a photograph cf. D. Levi, *op. cit.*, pl. 29, 2.

<sup>21</sup> Markman, pp. 44 f., fig. 20; Pfuhl, *MuZ.* fig. 105.

<sup>22</sup> E. R. Price, *JHS*, xlv, 1924, p. 212, fig. 49.

<sup>23</sup> F. N. Pryce, *Cat. Sculpt. Brit. Mus.* i, 1, 1928, p. 120, pl. 19. Early sixth century.

<sup>24</sup> E. D. Van Buren, *Figurative Revetments in Etruria and Latium*, London, 1921, p. 51, pl. 21, 1. About 600 B.C.

<sup>25</sup> E. Q. Giglioli, *L'Arte etrusca*, Milan, 1935, pl. 96. The interesting Faliscan vase in Philadelphia seems to be derived from a Greek design antedating the final formulation of the Daedalic equestrian type—of the period represented by the Menelas Stand. E. H. Dohan, *Italic Tomb Groups in the University Museum*, Philadelphia, 1942, pp. 64 and 66, fig. 38, pl. 34. Cf. Hampe, *op. cit.*, fig. 30; *CVA*, Berlin I, pls. 31-33.

<sup>26</sup> J. F. Crome, *AA*, xl, 1934, p. 403, No. 19, fig. 34.

<sup>27</sup> Fig. 18, after K. A. Neugebauer, *Fuehrer durch das Antiquarium ii, Vasen*, Berlin, 1932, p. 30, pl. 17.



tradition; otherwise the Rhodian horse is almost ridiculously similar to the boars and dogs of Rhodian plates and quite different from other Greek horses. It is, of course, several decades later than the Sardis vase.

On the strength of these comparisons, we can place the Sardian frieze in the third quarter of the seventh century. But how should we assess its importance for the creation and development of this type? Its origin has been usually sought in Crete and this location was accepted by Friis-Johansen and Payne.<sup>28</sup> R. Demangel has called it "Creto-Ionian," with emphasis on "Ionian."<sup>29</sup> If, however, as we have argued, both the sherd from Naucratis and the Sardis vase are later than the Melian and Cretan pictures, priority still rests with the Creto-Cycladic area.<sup>30</sup>

Whatever its precise date, the rider frieze from Sardis is of capital importance as testimony for figurative art in seventh-century Asia Minor. It shows that the more ambitious painted vases which reached the capital of Lydia were Greek or inspired by Greece. More than that: the Sardian riders certainly do not impress one as a direct adaptation of Oriental models.<sup>31</sup> These fragments are proof that workshops of Asia Minor depended on the stylistic advance made in the West, in Crete, and in the islands. Indeed, by comparison with human representations of this region as well as of the Greek mainland, the artist of the Sardis vase was both backward (ornament) and somewhat barbarized (weak rendering of horses' legs). The painted friezes from Pazarli are also influenced by Greece and are even more barbarized.<sup>32</sup> Both are important as forerunners of later Ionian terracotta friezes, but it seems well nigh impossible to regard them as leading products in the transmission of Oriental influence.

Other early pottery from Sardis bears out the contention that Lydia was not a leading province in the craft of vase-painting. Geometric sherds of great variety depend largely upon Greek inspiration. Here, as in Phrygia, the upper limit does not seem to be much earlier than the late eighth century. In the late seventh century, imports as well as local imitations indicate the Eastern Greek ("Rhodian" and "Naucratis") type of floral and animal ornament as a major influence.<sup>33</sup> The

<sup>28</sup> Johansen, *op. cit.*, pp. 151 f.; Payne, *NC*, pp. 70 ff.; *Perachora*, p. 147.

<sup>29</sup> Demangel, *op. cit.*, p. 162, n. 3.

<sup>30</sup> The sherd from Naucratis is, I imagine, of the last quarter of the seventh century. Of the other two Naucratis examples given by Demangel, one is a galloping rider of the sixth century and the other a terracotta figurine of quite different appearance.

<sup>31</sup> Oriental riders of the "walking" type appear (but not in a procession) on the bronze gate from Balawat: *CAH*, Vol. of Plates i, p. 216, top, and on the Phoenician ivories of the Bernardini Tomb, *MAAR*, iii, 1919, pl. 36. I think the comparison shows them to be entirely different from the "elongated" type, though Oriental models may have played a part in the original adoption during the late Geometric period. The checkered chiton of the Sardis horsemen may be a garment of Oriental stuffs.

<sup>32</sup> Remzi Oguz Arik, *AA*, liv, 1939, p. 173, rightly regards Greek influence as the important factor in the production of these figurative friezes. He thinks the motifs Oriental, but they may be found in much the same form on "Rhodian" and other Eastern Greek vases. Very thoroughly barbarized are the two galloping horsemen of a Phrygian relief, Perrot-Chipiez, *Hist. de l'art*, v, 1890, fig. 115. They are probably copied from a North Ionian terracotta frieze.

<sup>33</sup> None of the Geometric sherds have been published. The vase fragments reproduced by T. L. Shear, *Sardis* x, pp. 5 f., figs. 3 and 4, and *AJA*, xxvi, 1922, p. 395, fig. 4, must be counted as Orientalizing. They seem to stem from the later phase of the Rhodian and Naucratis styles. The vases, Richter, *Guide to the Class. Coll.*, Metropolitan Museum, 1930, figs. 226 and 227, also show relations to Eastern Greek wares.



Lydian vases of the sixth century derive almost their entire modest ornamental vocabulary and many of their shapes from Greek sources.<sup>34</sup> Only the "streaked" or "marbled" technique is a local invention, made perhaps in imitation of glass vases. Of the non-Greek shapes,<sup>35</sup> only the "lydion" gained some popularity in the Greek world.<sup>36</sup> But in decoration there is no trace of elaborate Oriental motifs which could have influenced Greek vase-painters. The Sardian terracotta friezes are Greek from the start.<sup>37</sup> Jewellery is the only class of objects found in Sardis in which Oriental influence is clearly present; and a much more careful investigation is needed before it can be asserted that any of the Sardian gold and silver plaques are Assyrian and earlier than the sixth century.<sup>38</sup> Historical probability favors the assumption of a local school of goldsmiths in the capital of Lydia, but if such a school existed, it failed to exert any influence upon the sculptors and vase-painters of Sardis. Trade with the East there surely was; but so far, Lydia appears largely as an outlying province of Greek art. It is difficult to see how the Lydians could have influenced the important developments of Greek Orientalizing art.<sup>39</sup> And even for trade, we might take a cautious view about the importance of land-routes through Asia Minor during the "Dark Ages" and the early part of the Lydian era.

How, then, was Oriental influence transmitted to seventh-century Greece? Miss Richter has recently emphasized the importance of the island region (including Delos, Naxos, Paros, as well as Chios and Samos) for the creation of the earliest

<sup>34</sup> This appears even in the limited number of examples so far published, *Sardis* i, figs. 73, 124-126. In fig. 75 only the lydion and the sieve are entirely free from Greek influence. The proportions of the three jugs show native taste for heavy forms and bizarre handles, but they are close to Greek shapes. For the crater cf. T. L. Shear, *Sardis* x, p. 5 and color plate.

<sup>35</sup> The spouted pitcher: G. H. Chase, *AJA.* xxv, 1921, pp. 114 ff., fig. 2. Compare now also K. Bittel, *ABA.* Phil. hist. Klasse 1935, No. 1, p. 57 and pl. 13 a-b, and H. Goldman, *AJA.* xxxix, 1935, p. 547, fig. 43. Of the vases in the Metropolitan Museum, the ram-headed jug (*Sardis* i, fig. 126), a double-mask vase, and some large basins have non-Greek shapes, while several goblets and plates have indigenous forms of handles. The white-slip plate, Richter, *Guide*, 1930, fig. 227, is a native variation on a Rhodian theme.

<sup>36</sup> A. Rumpf, *AM.* xlv, 1920, pp. 63 ff.; *CVA.* Fogg and Gallatin, pl. 1, 1, with references for Athens; *CVA.* Rodi, Italia, pl. 431, 2; *Clara Rhodos* iii, p. 30, fig. 15; T. L. Shear, *AJA.* xxxiv, 1930, pp. 421 ff., fig. 15 (Corinth); I. S. Ryberg, *An Archaeological Record of Rome*, 1940, p. 11, fig. 11; G. Welter, *AA.* liii, 1938, p. 496 (Aegina); *RM.* 1923-4, pp. 74 f., fig. 2.

<sup>37</sup> T. L. Shear, *Sardis* x, for discussion of terracotta friezes found in Sardis. The publication of friezes from Larissa seems to leave little doubt that these "North Ionian" friezes were largely products of one workshop (L. Kjellberg and A. Åkerstroem, *Larissa am Hermos* ii, Stockholm, 1940).

<sup>38</sup> C. Densmore Curtis, *Sardis* xiii, Rome, 1925, p. 11, pls. 1, 8, 11. Curtis called certain gold plaques Assyrian; comparisons with Assyrian, Neo-Babylonian, and Persian material should yield a fairly exact date.

<sup>39</sup> There is no evidence earlier than the late seventh century of Lydian arts and crafts at all comparable to Phoenician, yet it is quite frequently inferred that Lydia must have had a flourishing pre-Mernad culture, and that Lydia exerted great influence upon seventh-century art of Greece. See R. Demangel, *op. cit.*, pp. 123 ff.; P. N. Ure, *The Greek Renaissance*, 1921, pp. 47 ff., p. 55: "skilled workmen from the East may have come at least as far as . . . Sardis . . . and directly or indirectly Greek workmen must have become their pupils." M. Rostovtzeff, *A History of the Ancient World*, pp. 193 ff.: "The technical skill of Aegeans and Egyptians, of Mesopotamia and Phoenicia found refuge in Anatolian temples. . . ." and "The Lydians, as heirs of Hittites, raised industry and trade to an unprecedented height . . . Greeks imitated native techniques in textiles and jewelry. . . ." D. G. Hogarth, *CAH.* iii, 1925, ch. xxi, argued that "the pitch of artistic achievement attained (in Sardis) by the middle of the seventh century presupposes a 'not inconsiderable' Lydian civilization before 700 B.C."



large-scale stone statues.<sup>40</sup> Now the Sardinian frieze indicates that in relief, too, the artists of Asia Minor depended on Greece for their representation of the human figure—not on Assyria, Phoenicia, or the Syro-Hittites. It seems quite possible that at least during the early phase of the Orientalizing period (725–650 B.C.) the important artistic impulses reached Greece primarily over Crete and the islands; and that these regions, together with Corinth and Athens, took the lead in the artistic revolution of the seventh century, which established the human figure as the central theme of Greek art.

On this showing, the art of Asia Minor did not become an important factor in the artistic relations with the Orient until the late seventh century. Beyond that, an interesting problem is posed by the results of various recent excavations in Asia Minor. In Larissa, Ephesus, and apparently also in Colophon and Miletus, the year 700 B.C. appears as the approximate upper limit of painted Greek pottery. The situation is similar in Troy and Tarsus. This gap (x-ix cent.), corresponding to the "Dark Ages," is the more striking because of the continuity of material on the Greek mainland, especially in Attica. Many historians have maintained that during the "Dark Ages" the Greek cities of Asia Minor were relatively civilized and continental Greece backward. Future excavations may yet prove this view to be correct; but at present it looks very much as if during the Submycenaean and early Geometric ages, even in the Mycenaean foundations in Asia Minor, the Greeks did not differ much in their material culture from their "Iron Age" Carian and Phrygian neighbors.<sup>41</sup> Homeric

<sup>40</sup> *Kouroi*, New York, 1942, pp. 43 ff. Miss Richter includes Eastern Greece and Naucratis as possible claimants. The islands off the coast of Asia Minor were, perhaps, somewhat ahead of the cities along the coast and in the interior.

<sup>41</sup> A detailed defense of this view would entail a complete discussion of all sites in Asia Minor, in which Geometric pottery has been found. It would further involve an investigation of the chronology of Phrygian, Cypriote, and North Syrian Geometric styles. Material bearing on this question has been discussed by H. L. Lorimer, *JHS*, liii, 1933, pp. 161 ff.; Kuebler and Kraiker, *Kerameikos* i, 1939, pp. 170 ff.; A. Rumpf, *JdI*, xlviii, 1933, p. 65. A discussion of Greek and Phrygian pottery, with a map of sites, K. Bittel, *ABA*, Phil. hist. Klasse 1935, No. I, pp. 19 ff., 54 ff., 59 ff., 90 f. Cf. also H. H. Von der Osten, *Alishar* iii, p. 452. The influence of Greek Geometric appears about 700 B.C. It is still doubtful how much earlier the Phrygian painted pottery should be placed.

In Asia Minor, two important sites, both inhabited continuously, have been added to Rumpf's and Bittel's lists of sites with Greek pottery: Troy and Tarsus. C. Blegen mentions "grey" ware, "native monochrome" as well as Geometric vases for Troy VIII, but the bulk of the Greek material is again Eastern Greek Orientalizing: *AJA*, xxxix, 1935, p. 16; xli, 1937, pp. 30, 44, 47; xliii, 1939, p. 223, figs. 24–25. Rhodian Orientalizing is said to have been found at Ak-Alan: K. Bittel, *AJA*, xlviii, 1933, p. 174. Orientalizing wares in Lesbos (Mytilene): K. Schefold, *AJA*, xlviii, 1933, pp. 154 f., figs. 11 f. (late seventh century).

In Larissa the pre-Greek monochrome pottery is thought to have extended into the eighth century. It is followed by Eastern Geometric and Orientalizing, dated after 700 B.C.: K. Schefold and J. F. Crome, *AJA*, xlviii, 1933, pp. 144 f., 150 ff., figs. 9 f. and xl, 1934, pp. 389 ff., figs. 25–32. In Old Smyrna, the earliest Greek pottery is dated by Miltner in the ninth century, but much of it seems to be paralleled at Al-Mina Sueidia, where it is regarded by M. Robertson as dating from the late eighth or even the seventh century: *JOAI*, xxvii, 1931, Beiblatt, p. 170, figs. 85–87 and *JHS*, lx, 1940, pp. 2 f., 21.

In Colophon, a Mycenaean and a Geometric cemetery are reported, but the Geometric sherds found in the city date from the seventh century: L. Holland, *Hesperia* xiii, 1944, p. 91 and 137 ff. In Ephesus, the vases found are said to "reach into the Geometric period," but no Submycenaean pottery has been found, and the vases published are partly Orientalizing, partly of the type found with Orientalizing elsewhere: J. Keil, *JOAI*, xxiii, 1926, Beiblatt, p. 253, figs. 44–46. The Geometric ware of Chios is similar to that of Samos: W. Lamb, *BSA*, xxxv, 1935, pp. 157 ff., pls. 34–36. And in Samos again a local



descriptions were reminiscences of things very much past. No wonder that Hesiod's father left for Boeotia.

HARVARD UNIVERSITY

GEORGE M. A. HANFMANN

#### A CORRECTION

In my article on the fragments of the Horsemen Vase from Sardis, I have failed to observe that something is known about the circumstances under which these fragments were found. A photograph of some of the fragments appears in *Sardis i*, The Excavations, Illustration 170. In the text (p. 151), H. C. Butler speaks of the "New Trench Northeast of the Main Excavations." This trench, dug in the campaign of 1914, "began to show from the first even and definite strata of pottery." "Not more than 6 m. below the surface we came upon clear and consistent levels abounding in sherds and complete vases of Lydian ware which, from evidence discovered in the tombs, are known to date from the *sixth* and *seventh* centuries B.C. Many of these objects, which are of much beauty and interest (Illustrations 168 and 170, the Horsemen Vase) were found close to loose rubble foundation-walls of houses the upper parts of which, probably built of mud brick, had been entirely destroyed."

This account is not too precise. But we learn that the vase did not come from a tomb: and the data on stratification are quite in keeping with the seventh-century date suggested in the article on stylistic grounds.

GEORGE M. A. HANFMANN

monochrome precedes the Greek painted pottery, none of which seems earlier than the eighth century: W. Technau and J. Eilmann, *AM.* liv, 1929 and lviii, 1933, pp. 49 ff. In Miletus, Mycenaean is admittedly followed by late Geometric and "Rhodian" Orientalizing. Von Gerkan's observation of continuous habitation in Mycenaean areas does not, in itself, constitute a sufficient argument to extend the range of pottery; final decision will have to await the publication of vases found. H. Von Gerkan, *Milet i*, 8, *Kalabaktepe*, Berlin, 1925, pp. 77 f., 113 ff.; *Milet ii*, 3, *Die Stadtmauern*, Berlin, 1935, pp. 6 f., 9 f., 118 f. Finally, in Tarsus, the pottery of the period from 1000 B.C. to 700 B.C. is related to Iron Age wares of Cyprus. Rhodian and Corinthian follow: H. Goldman, *AJA.* xxxix, 1935, p. 547, figs. 41-42; xli, 1937, pp. 276 f.; xlii, 1938, p. 44, fig. 33.

To sum up the results: so far, no site appears to be known in Asia Minor which would present a continuous development of pottery from Mycenaean through Submycenaean and Protogeometric to Geometric. The Greek Geometric style does not appear in the Ionian islands before 800 B.C. and not before the later part of the eighth century in the coastal cities. The first great period of expansion of Eastern Greek pottery appears to fall in the second half of the seventh century, the time of floral bowls and "Rhodian-Naucratite" animal friezes.

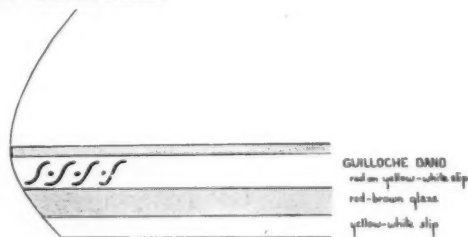


FIG. 9. — PARTIAL PROFILE OF THE PAINTED RELIEF VASE FROM SARDIS. METROPOLITAN MUSEUM



1945  
October-December

ARCHAEOLOGICAL NEWS AND DISCUSSIONS  
NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS  
SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN  
CURRENT PUBLICATIONS

STEPHEN B. LUCE, *Editor-in-Charge*  
Fogg Museum of Art, Harvard University, Cambridge, Mass.

NECROLOGY

**James Harvey Gaul.**—Word has only recently been received that Lieutenant JAMES HARVEY GAUL, USNR, met his death, at the age of thirty-three, at the hands of a firing squad, at the notorious Mauthausen concentration camp near Linz, Austria, late in January, 1945. As he was in uniform when captured, and therefore entitled to prisoner of war treatment under that Geneva Convention which the Germans claimed to recognize and abide by, his death can only be called deliberate murder, such as only Germans are capable of committing. Lieut. Gaul was born in Pittsburgh, in 1911, and was graduated from Harvard in the Class of 1932, receiving, also from Harvard, his Ph.D. in 1940, with a thesis on *The Prehistory of the Danube*. During the intervening period he had taken part in many archaeological expeditions in different parts of Europe and the Middle East, becoming in the process an accomplished linguist. After receiving his doctorate, he taught at Brooklyn College, and worked for the State Department, until his enrollment in the Naval Reserve in April 1941. Attached to the Office of Naval Intelligence, he was first sent to the Middle East, but in 1944 was detached and assigned to the Office of Strategic Services. At the time of his capture by the Germans he was on a combat mission (hence wearing a uniform) in Czecho-Slovakia, a country in which he had worked as an archaeologist. He was unmarried, and is survived by his mother and a sister.

S. B. L.

**George Dana Lord,** Professor of Classical Archaeology at Dartmouth College from 1908 to 1933, died at Hanover, N. H., on June 29, 1945, at the age of eighty-two. Born on March 7, 1863, he was graduated from Dartmouth in the Class of 1884. After three years of secondary school teaching, he returned in 1887 to Dartmouth as Instructor in Greek, becoming Assistant Professor in 1891, Associate Professor in 1900, and Professor of Classical Archaeology in 1908. In the academic

year 1895–1896 he was a student at the American School of Classical Studies at Athens, taking part in the first excavations at Corinth, and he returned to Greece in 1912. He became *emeritus* in 1933, after having been on the Dartmouth faculty for forty-six years. He was for years a member of the Archaeological Institute, being affiliated with its Boston Society. A daughter survives. He will be missed by a host of former Dartmouth students, as he was one of the most beloved members of the Faculty, and by a large number of professional friends and colleagues.

S. B. L.

**Theodore Leslie Shear.**—The Archaeological Institute of America and the world of classical archaeology at large have suffered a great loss in the death, on July 3, 1945, of Theodore Leslie Shear, scholar and field archaeologist. He was widely known in the archaeological world both in this country and abroad as an energetic, thorough and enthusiastic excavator and lecturer, and has been a major contributor to this JOURNAL for many years.

His most recent activity was the Field Directorship of the Excavations of the Athenian Agora, conducted under the auspices of the American School of Classical Studies at Athens through a grant from the Rockefeller Foundation. From the inception of the work in 1931 until 1939, when the war forced a suspension of operations, he inspired and guided the progress of this undertaking, and in the course of eight intensive campaigns, he and the staff which he had gathered and trained practically brought the program to a close.

Born at New London, N. H. (where he died), on August 11, 1880, Professor Shear was graduated from New York University in 1900 and in 1904 received the degree of Doctor of Philosophy from Johns Hopkins University. Then followed a year at the American School of Classical Studies at Athens, and in 1905–1906 a year at the University of Bonn. A teacher of Classics, first at Barnard and then at Columbia, where he was Associate in Greek until 1923, Shear became associated with Princeton University in 1921,



first as Lecturer and later as Professor of Classical Archaeology, a position which he held until his death.

Always keenly interested in all phases of classical studies, he and his first wife, Nora Jenkins Shear, whom he married in 1907, spent several seasons cruising the eastern Mediterranean in a small yacht, and in the course of their travels examined a number of ancient sites. They were interested spectators of the surrender of Rhodes by the Turks to the Italians in 1912.

Professor Shear participated in several major archaeological expeditions, including that of the American Society for the Excavation of Sardis in Asia Minor, an enterprise initiated and directed by the late Howard Crosby Butler of Princeton University. In 1925 Professor and Mrs. Shear, who was also well trained in the archaeological field and an able artist, initiated at their private expense a series of impressive excavations at Old Corinth where the American School had been working for over a quarter of a century. In two campaigns the major part of the theater was uncovered, as well as two smaller sites, one of which produced a magnificent series of floor mosaics in a villa of the Roman period. After his wife's death in 1927, Shear returned to Corinth to complete the work, and later excavated a large cemetery to the northwest, where graves of all periods from Geometric to early Roman yielded an important collection of vases and other objects.

In 1931 Shear married Josephine Platner, also an archaeologist. She, with their son, Theodore Leslie Shear, Junior, and his daughter by his first marriage, Chloe Louise Smith, survive him. Shear terminated his work at Corinth to undertake the directorship of the excavations in the Agora at Athens, and from that time on bent all his energies to the furthering of that task.

During World War I he held the rank of First Lieutenant in the Air Service, and contributed liberally of his time and his knowledge of the Mediterranean to the Government during the recent war. Long a member of the Managing Committee of the American School of Classical Studies at Athens, he was a trustee of that organization from 1936 to 1942. Member of the American Philosophical Society and of many other scholarly organizations, author of numerous publications in the archaeological field, L.H.D. *honoris causa*, 1934, of Trinity College, Hartford, organizer, executive, scholar and lover of Greece in whose behalf he labored hard and to whose re-

lief he gave generously during the war, positive, enthusiastic, sensitive and kindly, Leslie Shear's death came as a shock to his many friends and leaves a gap in the ranks of Classical Archaeologists which will long be felt.

RICHARD STILLWELL

Gilbert Campbell Scoggin, the first Librarian of the Gennadeion at Athens, from 1925 to 1930, died very suddenly on August 1, 1945, at the age of sixty-four. He was born in Glass, Tennessee, on April 29, 1881, and was graduated from Vanderbilt University in 1902, receiving his A.M. at the same time. After two years of secondary school work, he entered the Graduate School of Arts and Sciences at Harvard University, receiving his Ph.D. in 1906. From 1908 till 1920 he was at the University of Missouri as Instructor and Assistant Professor of Greek, returning to Harvard on leave of absence in his last year (1919-1920) as a Lecturer in Classics. Then followed two years on the staff of the *Encyclopaedia Britannica* (1920-1922), a year at the University of Michigan (1922-1923), and a year at Western Reserve (1924-1925) until his appointment as Librarian of the Gennadeion. On his retirement in 1930, he settled in Cambridge, Massachusetts, the home of his wife, who was the daughter of the late Professor Francis J. Child of Harvard, and who survives him, together with his mother and an unmarried sister. Besides his connection with the School at Athens, he is known to archaeologists for his book on *Mycenaean Troy* (with Professor H. C. Tolman), which was a most useful text-book in its day, though now superseded by the more recent excavations. From 1915 to 1925 he was one of the Editors of the *Classical Journal*. Members of the School at Athens who were in residence during his term as Librarian of the Gennadeion will always remember the gracious hospitality which he and Mrs. Scoggin dispensed at their house, and will feel a deep sense of personal loss in his passing.

S. B. L.

Gordon Jennings Laing.—On September 1, 1945, Gordon J. Laing, Vice-president of the Archaeological Institute of America, 1913-1936, died from a stroke suffered while he was playing golf at the Lake Zurich Golf Club, of which he was a distinguished member. He was born at London, Ontario, October 16, 1869. He received his A.B. in 1891 from the University of Toronto, which in 1923 conferred on him the degree of Litt.D. For the years 1891-1893 he was Classical Master in Whetham College, Vancouver. From



1893 to 1896 (1895-96 as fellow in Latin) he followed graduate courses in Latin, Greek, and Roman Law at the Johns Hopkins University, where he took his Ph.D. in 1896. His dissertation, *The Genitive of Value in Latin and Other Constructions with Verbs of Rating*, was so good that he was frequently urged to publish it, which he finally did in 1920 at the University of Chicago Press. Certain sections had already been published in *Studies in Honor of Basil L. Gildersleeve*, pp. 131-137 ("Notes on the Latin Verbs of Rating"). In 1896-1897 he went to Rome with his master, Minton Warren, and with Allan Marquand, and there as fellow of the American School of Classical Studies (in 1911-12 he was the annual Professor) he became interested in Roman palaeography, collating the Ursianus manuscript (Vatican 3262) of Ovid's *Fasti*, and discovering a third hand of the fifteenth century traced over the faded writing of the eleventh century. In this year, with such fellow-students as Walter Dennison, George Olcott, and Charles Hoeing, Laing acquired a good knowledge of Roman archaeology, on which for many years he lectured (especially on North Africa) before many societies of the Archaeological Institute. He was a devoted student of Gildersleeve and Warren, of whom he published a fine pupil's estimate in the *Harvard Graduates Magazine* for March, 1908. From 1897 to 1899 Laing was instructor in Latin at Bryn Mawr. In 1899 he went to the University of Chicago as instructor in Latin to join the Chicago giants of those days, Shorey, Buck, Capps, Hale, Hendrickson, Abbott, Clifford Moore, E. K. Rand, Angell, Dewey, etc. Laing was an excellent teacher and lecturer. He was also an attractive and handsome young man and married President Judson's daughter, who survives him. He rose from instructor to be Professor of Latin and became general editor of the University of Chicago Press (1909-1921, 1923-1941) and managing editor of the *Classical Journal* (1905-1908). He left the University of Chicago for two years (1921-1923) at McGill University, where he was head of the Department of Classics and Dean of the Faculty of Arts. After his return to Chicago his great executive ability and his unusual facility for humorous stories became even more apparent. He was in demand all over the country for lectures, commencement addresses, and after-dinner speeches. He received many honors and honorary degrees, the LL.D. from Western Ontario, Pittsburgh, Louisiana State University, and Johns Hopkins (1938), where he

made a brilliant commencement address. From 1923 to 1931 he served not only as professor of Latin, but Dean of the Graduate School of Arts and Literature at the University of Chicago. From 1931 to 1935 he was Dean of the Division of Humanities, and after he became Professor Emeritus (an honor one of his students wrote him that he had long deserved) he was Dean of Alumni (1940-1943), traveling from city to city lecturing to the alumni and others, and answering in the University of Chicago Alumni Magazine all sorts of questions. Laing presented the candidates for degrees and honors at the Chicago convocations and did so in a humorous but dignified manner.

He was a great classicist. He was associate editor of *Classical Philology*, 1905-1921, 1923-1945, president of the Classical Association of the Middle West and South, 1919-1920, president of the American Philological Association, 1924-25. Laing did his share of war work and was chairman of the National Groups Division, War Finance Committee of Illinois, 1942-1943. He served as president and vice-president of the Chicago Society of the Institute. He attended as vice-president the annual meetings of the Council for more than twenty years and took an active part in its executive and scholarly proceedings. His article on "Archaeology and Its Contribution to Philology" (*CJ.* xvi, 1920-21, pp. 451-463) is a real contribution. He published several books and many articles and reviews on all sorts of classical subjects, such as "Principal Manuscripts of the *Fasti* of Ovid," *AJA.* iii, 1899, pp. 212-228; "The Legend of the Trojan Settlement in Latium," *CJ.* vi, 1910, pp. 51-64; "The Church Fathers and the Oriental Cults," *CJ.* xiii, 1918, pp. 246-257; "Kirby Flower Smith," *CJ.* xiv, 1919, pp. 567-569; "Quintilian, the Schoolmaster," *CJ.* xv, 1920, pp. 515-534; "Roman Prayer in its Relation to Ethics," *CP.* vi, 1911, pp. 180-196; "The Origin of the Cult of the Lares," *CP.* xvi, 1921, pp. 124-140. This is not meant to be a complete list, but is typical of Laing's work, including some of his leading articles. Laing's books were *Masterpieces of Latin Literature*, 1903, *Selections from Ovid*, 1905, *The Phormio of Terence*, 1908, Laing-Shorey, *Horace*, 1910. Laing was an authority especially on Roman private life and religion, and this is apparent in his best book, contributed to the Hadzsits-Robinson series "Our Debt to Greece and Rome," *Survivals of Roman Religion*, 1931.

Laing had a fruitful life, with many activities.



He was an inspiration to all who knew him. There has been no greater loss this year to the cause of humanistic studies. He was what classical scholars should be but rarely are. He was more than a professor, more than an administrator, more than a dean. He not only loved books and scholarship, he loved a good story. His unfailing good humor, his attractive personality, and his sense of the absurd made him friends wherever he went. There was no wittier man in our profession, and nobody was better company. He was a real example of Ciceronian *humanitas*. DAVID M. ROBINSON

### GENERAL AND MISCELLANEOUS

**European Art Collections and the War.**—Under this title, GLADYS E. HAMLIN, in *College Art Journal* iv, pp. 155–163, gives a résumé of what was known up to the winter of 1945 of the fate of many of the private art collections of Europe. The museums and public collections have “fared far better than most of us dared to hope,” but some objects are still missing. An account is given of the precautions taken by the French, Italian, and Dutch governments for the safeguarding of their priceless collections. The adventures of the objects from the Naples Museum are described—some of which are still missing. The interesting story of the Bayeux Tapestry is related at some length. The collections made by Hitler, Goering, Himmler and Ribbentrop, by the process of confiscating private collections in occupied countries, and those of German Jews, are mentioned, together with “gifts” made to them—for example, the sending to Goering of part of the altar of the Abbey of Monte Cassino—while the famous altarpiece of St. Bavon of Ghent also went to him. Hitler sought to establish at Linz in Austria a Museum in memory of his mother, the contents of which had been stolen from private collections. A list of the more important items is given. Other private collections that were not confiscated were “bought,” or demanded as fines. The principal sufferers were the Rothschild and Wildenstein collections in France, and the Goudstikker and Wolf collections in the Netherlands. Plans had been made before the war for the systematic looting of occupied countries. This was true, not only for France, Belgium and Holland, but for Poland and Russia as well, as is proven by testimony of prisoners of war. Methods adopted for the protection of works of art, by Allied, and even German, authorities, are described in detail, particularly the work done in this country under the

auspices of the American Council of Learned Societies, and the Conference of Allied Ministers of Education in London. In an Addendum mention is made of the discovery, by American troops, of an immense hidden treasure of currency and over 1000 paintings in a salt mine at Merkers, Germany, on April 7, 1945, and the later discovery of large numbers of looted works of art and antiquities at Hungen, also by American soldiers.

**Ghassulian Culture.**—In *Biblica* (v, 22, fasc. 4, 1941, pp. 433–438), A. BEA discusses possible origins of the Ghassulian culture under the title “Ghassulkultur und Bandkeramik.” He accepts the now generally recognized date of the Ghassulian, first half of fourth millennium. In endeavoring to trace the source of this culture he makes large use of the evidence and arguments set forth in A. JIRKU’s *Die ältere Kupfer-Steinzeit Palästinas und der Bandkeramische Kulturkreis* (Berlin, 1941) and in the same author’s *Beziehungen zwischen Europa und Palästina in der jüngeren Steinzeit* (1937). The latter title indicates the nature of Bea’s discussion, since he hails Jirku’s tables showing an array of similarities between the European “Bandkeramik” (for the term cf. Ebert *REV.* i, 1924, pp. 342, 345) and the Ghassulian forms as a “revelation” of the relationships between these two cultures. No parallels are found in Europe to the Ghassulian mural paintings, but this is accounted for by the possibility that such work would have perished in the “damp northern climate and different soil conditions.” The chronological difficulty, that the European “Bandkeramik” has usually been dated a thousand years later than Palestinian Chalcolithic, is dismissed by conveniently pushing the European back to the beginning of the Fourth Millennium. This is done on the ground that no comparative data have been at hand for an exact fixing of the European prehistoric dates, while for Palestinian prehistoric periods there have been ample synchronizing data.

As to identification of the European migrants who brought the Ghassulian culture “to the borders of Egypt (Tell Fara)” and perhaps even to Egypt itself (Ma’adi),” neither Jirku nor Bea hazards an opinion. Further references are made to a study by the Viennese, Osw. Mengin’s *Einheimische Wurzeln der bandkeramischen Kultur* and to an investigation of prehistoric skulls by G. HEBERER in *Die mittel-deutschen Bandkeramiker* (1940). The latter investigator apparently is confident that the oldest “Bandkeramiker” be-



longed to the Mediterranean race. Admitting that there is much that is hypothetical in this presentation, Bea nevertheless holds strongly to the European origin of the Ghassulian and sees the final resolution of the problem to rest with the prehistorians of Europe. Orientalists outside Europe may take this "revelation" for what it is worth. It is still an open question.

**The Mediterranean and Ireland.**—GEORGE W. ELDERKIN. *Archaeological Papers*, Part VI (Pond-Ekberg Co., Springfield, Mass. 1945; pp. 65; 15 figs.). This set of three papers deals with the influence of the ancient Aegean on the western Mediterranean and Atlantic Europe, especially Ireland. The first, "The Bull and the Dove at Costig," deals with the remarkable bronze bulls' heads from a sanctuary on Majorca. These seem to be Minoan, or at least under Minoan influence. Other evidence is cited, such as the tholos tombs of Spain, western France and the British Isles, which the writer compares to those of Mycenaean Greece.\*

The second paper, "Eastern Influence in Basque," seeks to show by philological evidence, that at an early date a migration by sea took place to Spain from the eastern Mediterranean, and that it included elements which had previously come from the area of the Black Sea to Egypt.

The third paper, "Tara and Scythia," deals with a legend given by the seventeenth-century Irish historian, Keating. According to this, the Irish were descended from the Scythian Niul, who journeyed to Egypt in the days of Moses. There he married Pharaoh's daughter, Scotia, who bore him a son named Gaedhael. The family later went to Ireland by way of Spain. The author seeks to show that the archaeological evidence supports his claim that this legend reflects historical fact.

Although this is merely a summary, it may not be inappropriate to cite briefly another view of these matters. Connections between the Aegean, the Mediterranean islands, Spain and Atlantic Europe are quite clear, but are generally believed to be much older than the bulls' heads from Majorca or the Mycenaean tholoi. The tholos tombs of this western group are generally placed in the second half of the third millennium B.C., though connections between Spain and Ireland went on longer.

\*The most recent summary of this evidence by C. F. C. Hawkes in *The Prehistoric Foundations of Europe* places these tholoi much earlier than the Mycenaean ones.

The writer of this summary is not competent to comment on Basque philology, but it is possible to take a different view from Elderkin's on the Irish legendary material. In the first place, this story is unknown to the really ancient Irish texts. It is believed to form not so much a piece of genuine folklore as a late attempt to connect Ireland with the ancient Mediterranean world. Gaedhael is the same name as Gael. Scotia is supposedly an attempt to explain Scotia as an early mediaeval name for Ireland, while Niul is perhaps no more than a piece of pseudo-antiquarian flattery for the princely house of O'Neill, branches of which controlled various parts of Ireland.

**Scythian Antiquities in Central Europe.**—In *AJ.* xxv, 1945, pp. 1-12, T. SULIMIRSKI discusses the central European finds of Scythian remains from the standpoint of their importance in showing Scythian contacts with older groups in that area.

Scythian graves are found no further west than the territory of the West Podolian group, but Scythian objects are found as far west as Châlons-sur-Saône, the majority from the area of the Lusatian culture. These finds make it probable that a Scythian invasion of about 500 B.C. proved to be the turning point in Lusatian culture, leaving it so weakened that the Face-urn culture could supplant it.

**Where Three Countries Meet.**—Under this title, in *Geog. Rev.* xxv, 1945, pp. 239-256 (8 figs.), ERIK R. V. KUEHNELT-LEDDIHN has an interesting article on that section of the Tyrol that forms the border between Austria, Italy, and Switzerland. The article is of interest to archaeologists for its account of the people who inhabit this area, who are the direct descendants of the original racial type of ancient Rhaetia—"we are confronted here with a stark reality of human prehistory." The principal town in the area is Nauders (in Austria), probably to be identified with Ptolemy's Inoutrion, and the road that passes through it from Landeck in Austria to Meran and Bolzano in Italy follows the course of the Roman Via Claudia, connecting Italy with the colony of Augusta Vindelicorum (the modern Augsburg). The ethnic background of the Rhaetians is discussed—the question of their origin is complex and "the impression is definitely—non-European," but the writer does not commit himself to any precise point of view. "We encounter here a European survival from an age that knew not Greece and Rome."



**Belfast.**—*Geog. Rev.* xxxv, 1945, pp. 323-324, summarizes an article by E. ESTYN EVANS in *Ulster Journal of Archaeology*, ser. 3, vii, 1944. After discussing the geological formation of the soil, and its influence on human habitation, he gives a history of the area from Neolithic times to the final settlement of the city's present site. The principal Neolithic monument is the so-called "Giant's Ring," which suggests an infiltration from western Britain.

**Pangani.**—*Geog. Rev.* xxxv, 1945, pp. 325-326, summarizes an article by H. C. BAXTER, in *Tanganyika Notes and Records*, no. 17, 1944, pp. 15-25. He describes "this ancient port" and its influence in trade, claiming that it was known as far back as Sumerian and Assyrian times, and identifying it with the Rhapta of the *Periplus of the Erythraean Sea*. Its subsequent history is also given. It fell into German hands in 1890, and became British after World War I.

**East African Indigenous Stone Structures.**—*Geog. Rev.* xxxv, 1945, p. 326, summarizes an article by C. GILMAN in *Tanganyika Notes and Records*, no. 17, 1944, pp. 44-55. In this article a list is given of ancient and modern stone structures, in East Africa, with a map, showing distribution. The conclusion is reached that the natives had evolved a rudimentary and crude stone culture here and there, but that they were quite ignorant of cutting and dressing stone, consequently these structures were limited to "areas of neo- or older volcanic rocks—or of certain granites and schists weathering into slabs."

## EGYPT

**Egyptian Painting on Linen.**—In *B.M.A.* n.s. iii, 1945, pp. 201-203 (2 figs.), AMBROSE LANSING publishes an Egyptian painting on linen recently acquired by the Metropolitan Museum. After pointing out that Egyptian painting was for the most part on stone reliefs, on plaster, on wood, or on gesso, he shows that such paintings on linen must be funerary in character, to which this painting is no exception, as it represents the reception of food offerings by a deceased man, Hori, who must have lived late in the Eighteenth Dynasty. The man's hair is black, his flesh is brownish red, while bright naturalistic colors are used for the fruits and vegetables of the offerings. The drapery is white. It was originally part of a sheet for mummy wrappings or of a shroud, or (more probably) a seal for a container for liquid offerings.

## MESOPOTAMIA

**Oriental Seals in Redpath Library.**—THEOPHILE JAMES MEEK, in *BASOR.* 93, 1944, pp. 2-13 (pls. I-III), publishes a group of 18 seals owned by the Redpath Library of McGill University in Montreal. These seals range from Proto-Dynastic Egyptian (ca. 3000 B.C.) to Sasanian. Each seal is fully described and illustrated, and where it had previously been published, the bibliography is given. Nos. 1 and 2 are Egyptian Proto-Dynastic; 3 is Mesopotamian of the Uruk period; 4 and 5 are Sumerian; 6, Old Akkadian; 7 and 8, Third Dynasty of Ur; 9-12, Assyrian; 13 and 14, probably Syrian; 15, Phoenician; 16, probably Cypriote; 17, said to have come from North India, but showing Hellenistic influence, and dating in the beginning of the Christian era; 18, Sasanian. The provenance of the collection is unknown, but they are all outstanding examples, and the North Indian example is virtually unique.

**Tower of Babel.**—E. P. has a note in *B.M.A.* n.s. iii, 1945 (inside cover, opposite p. 185, with fig.) on this subject, and publishes an Assyrian seal-stone, dating in the eighth or seventh century B.C., showing a view of a ziggurat. It is stated that the ziggurat which inspired the Biblical writer was probably that of Marduk, which was destroyed and rebuilt several times, and which is described from the accounts in the cuneiform texts and from Herodotus. The word Babel is derived from the Akkadian Bāb-ili, "gate of the gods," which suggests the Israelite belief that these towers were incursions on the realm of Jehovah.

**Death of Gilgamesh.**—In *BASOR.* 94, 1944, pp. 2-12 (fig.), S. N. KRAMER publishes, with transliteration, translation, and commentary, a tablet from Nippur, hitherto unpublished, in the University Museum in Philadelphia, together with some texts, also in Philadelphia, copied by the late Edward Chiera, and published a decade ago. Together these two sections give the extant text of the Sumerian poem tentatively entitled *The Death of Gilgamesh*. A summary of the nature and contents of the poem is given. The tablet published here for the first time contains the last lines of the poem. This tablet, like the others from Nippur, would date from the early post-Sumerian period.

**Assyriological Gleanings.**—In *BASOR.* 93, 1944, pp. 14-17, A. L. OPPENHEIM continues studies begun in a previous number of this *Bulletin*. These



deal with the custom of marking slaves by branding or mutilation; with a text giving the first literary evidence of the cremation of the dead; and with the enumeration of the seven days of the week by dividing the months into two halves of two seven-day periods each.

### PALESTINE AND SYRIA

**Near Eastern Temples.**—Parts I and II of *Bib. Archaeologist* vii, are devoted to a discussion of temple forms and symbolism in Egypt and Mesopotamia (see *AJA.* xlix, p. 84), Part III to the temples of Syria and Palestine (by G. ERNEST WRIGHT), Part IV to the synagogue and church (by F. V. FILON). The development of the temple plan in Syria is described, and evidence is given that Solomon's temple, like the Egyptian and Babylonian temples, possessed a cosmic significance, being a microcosm of the world, the realm of the god. But certain distinctive features of the Jewish temple are pointed out, such as the absence of a statue in the *debir* and the presence instead of cherubim with outstretched wings bearing the invisible God, evidence of the fact that the true home of Yahweh was regarded as being in heaven. The temple was only an accommodation to human needs. The strength of the tendency in Judaism to emphasize the transcendence of God is shown by the fact that the sanctuaries were not conceived primarily as His dwelling place but as places where He revealed Himself. The problem of reconciling God's immanence and transcendence was solved by regarding the temple as the bearer of his Name. Unlike so many other temples, the Jewish temple was supported not by large grants of land but by a system of tithes. The reasons given by the author for this peculiarity are not entirely satisfactory.

Filon points out the inability of the Temple to meet the religious needs of the Jewish community, particularly in the later period when that community was scattered. The origin of the synagogue is discussed and the radical nature of this lay institution in the priest-controlled religious life of the Orient rightly stressed. The study of the Law rather than the offering of sacrifice now became central. Attention is drawn to recent tendencies in the Church to revert to priestly, temple conceptions and to make the "altar" rather than the Bible central. The Church itself is shown to be more closely connected, in its origins, with the home than with the temple or synagogue.

**Taanach.**—In *BASOR.* 94, 1944, pp. 12-27,

W. F. ALBRIGHT describes the mound of Taanach, five miles southeast of Megiddo, first explored by Ernst Sellin in 1901, with subsequent campaigns in 1903 and 1904. These excavations, conducted by a distinguished Biblical scholar, but one who was devoid of archaeological experience, made no attempt at stratigraphic analysis or chronology, so that further excavations on the site are much needed. Sellin did, however, take pains carefully to describe all objects found, including a number of cuneiform tablets. By an examination of Sellin's reports, it is possible to assign to these tablets a tentative date in the fifteenth century B.C., while the lower stratum may belong a thousand years earlier. The bulk of the article is devoted to a transliteration and translation of the four complete tablets found, which are letters to a certain prince, Rewašša, two of them being from an Egyptian official named Amenophis, one from a certain Guli-Adad (perhaps a Canaanite) and the fourth from one Akhiyami (suggested to be parallel to Abiyām or Abijah). A long and interesting commentary follows the transliteration and translation, and it is suggested that this Rewašša may best be placed in the period following the destruction of Megiddo by Tuthmosis III, i.e., after 1468 B.C., and that he was a person of considerable importance.

**Ugaritic Studies and the Bible.**—A considerable number of Biblical problems are receiving elucidation from the Canaanite cuneiform documents discovered at Ras Shamra (anc. Ugarit) on the Syrian coast, as is shown by H. L. GINSBERG in *Bib. Archaeologist* viii, pp. 41-58. For example, the identity of the sage Daniel mentioned in *Ezek.* 14:12 ff., 28:3, the origin of the Leviathan myth, and the parallelistic structure of so much Hebrew poetry. The employment of the same pairs of synonymous words and phrases in Hebrew and Canaanite poetry is particularly striking. Evidence is given that *Psalms* 29 has a Phoenician-Canaanite, rather than Palestinian, background and must be of ultimately Canaanite origin. The conception of Yahweh as a storm-god riding in a cloud-enveloped chariot, emitting peals of thunder and flashing forth darts of lightning is also shown to be derived from Canaanite conceptions of Baal. The value of the new documents for Biblical textual criticism is illustrated by improved readings and renderings of *Ps.* 42:2, 2 *Sam.* 1:21, *Job* 37:3, and *Prov.* 26:23.

**Peace on Earth.**—ALBRECHT GOETZE, in *BASOR.* 93, 1944, pp. 17-20, examines the Christmas



message in *Luke* ii, 14, and shows that it was probably derived from a formula encountered in the Ugaritic epic literature. The passage is quoted, with a translation, which is certainly very close to the idea in the Gospel.

## GREECE

### GENERAL AND MISCELLANEOUS

**Greek Calendar.**—In *JHS*. lxiii, 1943, pp. 52–65, GEORGE THOMSON discusses the Greek calendar. Its ultimate origin, Nilsson has shown, as in all calendars, was regulated by the moon. In his *Primitive Time-Reckoning* he pointed out that the Greek calendar differs from type in one important aspect. In Greece, with very few exceptions, the months bear the names of religious festivals. This shows that the Greek calendar developed under hieratic control. Nilsson believes that it was of non-Greek origin, and that it was introduced not earlier than the seventh century, or perhaps eighth, under the supervision of the Delphic priesthood. Thomson contends that it was a heritage of the Mycenaean age, even though only one month is mentioned by name in the *Works and Days*, and none in Homer. The answer to this difficulty lies in the Greek system of intercalation, a system which appears to go back to Hesiod's time (*W. and D.* 504). In eight years the lunar calendar would have gained a whole month over the solar year. In the historical period four festivals at Thebes and Delphi were celebrated in every ninth year in the region identified as the earliest home of the Greek calendar, where the octennial cycle seems to go back to the Mycenaean age. The Olympic Games, celebrated at alternate intervals of 49 and 50 lunations, were probably made quadrennial in 776 B.C. in order to give them a panhellenic status. The Olympic Games were established at an earlier date than any other quadrennial feast known to us and in an exceptionally backward community under the control of an ancient priesthood. The Olympic rule of celebration in the alternate months of Apollonios and Parthenios represents the application of an octennial cycle to a calendar which retained its primitive seasonal function and consequently was not fixed. The principle of subordinating the calendar to the season, its distinctive and archaic feature, can also be seen in the cult of Zeus Sosipolis at Magnesia. The octennium seems definitely connected with the kingship, a sacred number in Minoan-Mycenaean religion. Since at the end of the octennium sun, moon, and

stars were back where they had been at the beginning, the octennial period became a symbol of universal renewal and regeneration, a world cycle of birth, death, and resurrection.

**Aeschylean Universe.**—"On the stage of Aeschylus," maintains W. F. J. KNIGHT in *JHS*. liii, 1943, pp. 15–20, "great forces are broadly symbolised, working, according to the Pythagorean scheme, through antagonism to a new harmony." It is clear that a poet of Aeschylus' stature, born at such a time, must have assimilated a great number of conflicting world views. It is possible that the conflict in the poet's mind reflects the conflict in the world, that the solutions which the symbols of the poet find are the solutions to which the realities in the world will or should come; that the work of Aeschylus reflects within a span of twenty or thirty years the progress of all world history. Aeschylus could have seen the two threads of social history twining before his eyes—the rational and progressive, and the instinctive and conservative tendency. The one is of the head, of the male, and of the individual; the other, of the heart, of the female, and of the group. Aeschylus might in some moods have called these principles Apollo and the Erinyes. If one looks for the main levels or modes of the antagonisms which are strong in Aeschylus, one might say that they are the political, the moral, and the religious. For Aeschylus the problem is clear, and in a progressive development universal. He begins with a world in pieces and puts it together, or lets it put itself together. The form of universal question which he uses is: how is justice possible? Conflicts are shown to be creative, and god, man, and destiny find each a rightful place. But it all starts from observation of political forces. Thus in *Orestes*, on one side are the powers of tradition and unreasoned, impulsive habit, the Erinyes; on the other, the power of thought and reason and light and love of exact precision, Apollo. Crushed in between is man; and the appeal is to something in time, which is human life, the life of Athens. Athena. Yet there is also the conflict between the city, and the power beyond the city, the power of all the world. What is Athena, who is all for the Father? One worships Athena; but she worships Zeus. Though this is far too simple for Aeschylus, his truth lies within these patterns of thought.

**Messenger's Dance.**—*CO*. xxii, 1945, pp. 59–61, prints a condensation of an article on this subject by LILLIAN B. LAWLER. This dance, mentioned by Greek authors with little explanation, has been



a puzzle to modern writers on the dance in antiquity. It seems to have been performed at banquets, and in connection with the cult of Artemis Angelos at Syracuse, this epithet being elsewhere also applied to Hecate. There also originally seems to have been a Syracusan divinity named Angelos, daughter of Zeus and Hera, whose rites were associated with the Cabiric mysteries, and therefore furnished with a point of contact with those of Hecate and Artemis. In the drama, reference to a messenger's dance, probably of a mimetic character, is found in the text of the *Agamemnon* of Aeschylus, while Athenaeus tells us that the entire story of the *Seven Against Thebes* (where the messenger's part is important) could be acted out, without a word being spoken, by a competent dancer. Consequently it can be stated that the messenger's dance was in the nature of a pantomime, and therefore quite appropriate for presentation at banquets. The writer suggests that this dance was not necessarily performed at banquets by professionals, but often by guests who were called upon to contribute to the entertainment. The writer considers that many modern games played by children are derived from ancient dances, and cites certain guessing games (like charades) as possibly derived from the messenger's dance.

**Landing Craft in Ancient Greece.**—Under the title, "Landing Ship, Horse," H. N. COUCH, in *CO.* xxii, pp. 54–55, calls attention to a passage in Thucydides (ii, 56, 2) which indicates that Pericles in 430 B.C. equipped a fleet of 100 ships for a landing on the shores of the Peloponnese. This landing force included 300 cavalry, ἐν ναυσὶν ἱππαγωγῶν, "which were then for the first time constructed from old vessels." This experiment was largely, though not wholly, successful. Herodotus (vi, 48, 2) speaks of the Persians having ἱππαγωγὰ πλοῖα, but these were apparently not constructed for beachhead landings. Other references to similar craft in antiquity are given.

**Walbank's Philip V of Macedon.**—P. TREVES appraises in *JHS.* lxiii, 1943, pp. 117–120, Walbank's work on Philip V of Macedon, praised unanimously by eminent authorities of the Hellenistic Age. Walbank's great indebtedness is inevitably to De Sanctis and Holleaux, especially the latter. In this work and in the biography of Aratus, Walbank has proved that no national scheme, or principle of Greek national unity underlay either the policy and life work of Philip

V, or the political theory and practice of his Achaean counsellor, Aratus. He therefore dismisses any suggestion that a moral obligation should have bound the Greeks to Philip or Philip to the Greeks, and he acquits the Achaeans of any charge of treasonable behavior for letting the king face Rome alone, and eventually joining her against him. Though it is to be regretted that there is an absence of a wider economic background and a more minute investigation of literary authorities. Walbank, while reaffirming his attachment to the theories of Holleaux, has moved wisely along the lines of the intellectual requirements and tenets of a new school of historical writing.

**Rostovtzeff's History of Hellenistic World.**—A. MOMIGLIANO comments on a remarkable feature of M. Rostovtzeff's new *Social and Economic History of the Hellenistic World* in *JHS.* lxiii, 1943, pp. 116–117. The *Summary and Epilogue*, in contrast to the bulk of the work, chaps. III–VII (a gigantic inquiry into the consequences of Roman supremacy over the Hellenistic world) is an attempt to define what Hellenism was from an economic and social point of view. The problem was proposed in 1833 by J. G. Droysen. Between the ruin of classical Greece and the rise of Christianity there is a period of extreme dissolution and shapeless creation characterized by the mixture of Greek and Oriental elements. In Droysen's definition, that is Hellenism. In the Epilogue, Rostovtzeff joins company with Droysen in the resurrection of the Romantic ideal of a history embracing the whole of man. He is the only one up to date who has coped with the problem of the whole period from Alexander to Augustus, of which Droysen had conceived. The relations between Greeks and Orientals dominate the Epilogue. East replaces Rome in the foreground. The private life and mental pattern of the Hellenistic man becomes the important factor. Egypt makes way for Asia. Rostovtzeff's double history of Hellenism is substantially sound, because it grasps the fact that the strong side of Hellenism was the capacity of the individual to create new forms of Greek life in foreign environment, while political oppression either coming from kings or imposed by the Romans was the seed of ruin.

**Folksong Copied for Lord Byron.**—C. M. DAWSON and A. E. RAUBITSCHKE publish in *Hesperia* xiv, 1945, pp. 33–57, the text with full commentary of a Greek folksong copied for Byron by Miss Dudu Roque in Athens, April 19, 1811, and



also the first draft of Byron's translation of the song. Dudu Roque was the daughter of a French merchant and the cousin presumably of Teresa Macri, Byron's "Maid of Athens." Little is known of the history of Dudu's copy of the Greek song, but it was purchased by Mr. and Mrs. Halstead B. Vanderpoel in 1937, who gave it to the Yale University Library in 1943. Byron's translation in its original draft was in the possession of Byron's sister, Mrs. Augusta Leigh, until 1847, when she presented it to Joseph Parkes. It was purchased by Professor Chauncey Tinker in 1944, and is now in his collection. In this translation, "I enter thy Garden of Roses, Beloved and Fair Haidee," one of the three modern Greek songs which Lord Byron translated into English, it is interesting to compare the rather disconnected lines of the Greek with Byron's translation, and to perceive his excellent knowledge of Greek and the poetical craftsmanship which enabled him to create an integrated poem.

**Growth of Athenian Imperialism.**—RUSSELL MEIGS undertakes to re-examine the development of Athenian imperialism in the fifties of the fifth century in *JHS*. lxi, 1943, pp. 21-34. By 446/5 the Delian League had become the Athenian empire. During the fifties three new forces were at work, the reforms of 462, which had introduced a radical democracy, the abrupt change in Athenian foreign policy, the activity of Persia. Evidence for the growth of imperialism is fragmentary, and often uncertain. None of the contemporary inscriptions is well preserved, few can be dated accurately. Collectively they provide invaluable information. The first, and probably the earliest, is the longest of the decrees regulating Athenian relations with Erythrae (*IG*. i<sup>2</sup>, 10), and two fragments in *IG*. i<sup>2</sup>, 11 and 12/13a. It is possible that Erythrae broke away from the League in the early fifties, was recovered, but gave further trouble in the late fifties. In Miletus in 454/3 the city made no payment to Athens, the town is in revolt, and the loyalists have fled. The tribute lists of 452/1 suggest that they are back by then, and there is evidence for the expulsion of Medizers: In 450/49 (*IG*. i<sup>2</sup>, 22) Athens tightened her control by measures which included the establishment of Athenian political residents. The experiment was unsuccessful, Miletus refused tribute payment in 448/47. A new settlement was needed, and a democracy was now imposed on the Athenian model. A decree (*IG*. i<sup>2</sup>, 33, re-edited with new fragment by Meritt in *Hesperia* v, 360) praises

the men of Sigeum for their loyalty to the Athenian demos, probably at a time when other cities were infected with Medism and had to be brought back into the League by force. It is natural to suspect Colophon in this unrest (*IG*. i<sup>2</sup>, 14/15). An examination of the tribute lists indicates that a considerable proportion of the island district did not bring tribute to Athens in the late fifties, a fact which needs explanation in view of the nearness of many of them to the Persians. It was apparently a popular policy adopted by Cimon to conciliate the allies. An explanation for the absence of the islanders is to be sought in part in the removal of the treasury from Delos to Athens in 454 B.C. The penalty for their defaulting is to be seen in the system of cleruchies established by Athens. Imperialism began in the sixties, but was greatly accelerated in the fifties. During this period all the most important instruments of empire had been forged. Democracies had been encouraged and established, garrisons and political residents had been installed, the first cleruchs had already been settled on allies' land. Athens above all owed her empire to the imperialists of the fifties.

#### ARCHITECTURE

**False Doors on Tombs.**—F. J. TRITSCH in *JHS*. lxi, 1943, pp. 113-115, discusses one of the tantalizing questions relating to Lycian pillar tombs, the use of the top openings, which are usually called doors. The apertures measure from 0.20 m. to 0.45 m., give access to a sort of cavity, the floor level of which is a good deal below the bottom of the opening, and from within these apertures must have looked a good deal like windows. All these openings are high (4-6 m.) above the ground and were filled with stone slabs. No coffin could have passed through them, for their size is exceedingly small. Similar openings are to be found in false doors and windows in the gables of Lycian sarcophagi. Tritsch examines the widespread tradition of pseudo-doors on tombs from many centuries and believes that they were intended neither for offerings nor for the buried person's body, but for his spirit. Just as in the house, so in a tomb, the spirit must not be imprisoned but must be given an exit. The spirit of the deceased was supposed to hover about the tomb for quite a time. The pseudo-door built into the tomb was not merely an exit for the spirit; it was also a window enabling him to return to this last resting place of his body.



## VASES

**Pottery in Crete.**—DORO LEVI in *Hesperia* xiv, 1945, pp. 1-32, demonstrates (with an elaborate appendix and illustrations) that we must reconsider the prevalent attitude that the Cretan school was backward in comparison with all the other Geometric schools of Greek pottery, that it appeared reluctant to accept the linear elements which constitute the essence of that art and to organize them into a rigid architectural system freely arranged. It has been held that Orientalizing pottery was practically unknown in Crete, that the Orientalizing art passed from the centers of its creation, such as Cyprus and Rhodes, through Ionia directly to continental Greece. Crete was believed to have given at most a purely local re-elaboration of this style. The Geometric-Orientalizing period was seen as the final dwindling out of the artistic production of the island. As a result of excavations carried out in Crete in 1924 at a site in the center of the island near the slopes of the Lassithi mountains, and in other excavations dedicated to the same problem, a productive school of Geometric pottery was revealed, and these new finds, together with monuments previously known, help us in following the successive and progressive transformations from the latest Mycenaean manner to the art of the new age, without any violent change or sudden break between past and present. At the very moment of the full stylistic and technical formation of a Cretan Geometric school, about the middle of the eighth century B.C. begins the infiltration, at first cautious and hesitating, of the elements of a new style, inspired by contact with the arts of the East. These elements multiply, and direct the whole decoration toward a new and contrasting system, toward the "Orientalizing" art. Actually Crete was the first (partly with Rhodes) to welcome renewed influences from the East. Even the most characteristic pattern of the Orientalizing style, the rows of running animals, may be found in Crete, in a vase as early as the Kavousi hydria, which in shape, technique, and figured decoration is so characteristic of the Protogeometric manner as to make us admit its direct derivation from late Mycenaean art. It is likewise evident that much of this Orientalizing art the island was able to transmit to the Greek mainland. This can be seen especially in the products of the Protocorinthian factories, where the globular lekythoi, the long necked lekythos, the annular askos, the high

pyxis, even the early ovoid toilet bottle were introduced from Crete, Cyprus, and Rhodes. The alabastron, the aryballos, the kotyle should be regarded as shapes of Cretan origin, or at least their passage through Crete from Eastern sites, such as Cyprus, should be taken, on the basis of recent discoveries, as very plausible.

**Four Vases in New York.**—In *B.M.A.* n.s., iii, 1945, pp. 166-171 (9 figs.), GISELA M. A. RICHTER publishes four vases recently acquired by the Metropolitan Museum. The earliest, an Attic black-figured hydria, dating in the second half of the sixth century B.C., is a "lost" vase (first published in *AdI.* 1850, pls. E, F, 1; then sold in 1899 with the Forman Collection) from Vulci; it is placed by Beazley in the group of London B76. Two late red-figured amphorae, dating about 400 B.C. showing battles between Greeks and Amazons and Greeks and Greeks, are virtually intact, and belong to the Suessula Painter; they were found at that site, and were at one time in the Borelli Bey Collection, dispersed in Paris in 1913. Finally a small oenochoe, said to have been found at Eretria, is decorated with polychrome relief designs of Aphrodite and her retinue. This vase belongs in the late fourth or early third century. At the beginning the article contains a discussion of the evolution of three-dimensional painting in Greece, and the suggestion is made that the famous inscription on the Munich amphora of Euthymides, "Euphronios never did anything like this," applies only to the figures of revelers near whom it is written, for these figures, in the writer's opinion, surpass all of Euphronios' extant work in being drawn in three-quarter front and three-quarter back views, something Euphronios does not seem to have attempted.

**Campanian Red-Figure.**—J. D. BEAZLEY publishes in *JHS.* lxiii, 1943, pp. 66-111, groups of Campanian red-figure, beginning with the Owl-Pillar group, which has no direct connection with Campanian vase-painting of the fourth century, but which contains red-figured vases, and their finding places point to their having been made in Campania. He then proceeds in his listing more or less chronologically, pointing out that while Campanian pottery is provincial, the vases are no worse than many Attic vases of the same period. The absence of kalos-names does not indicate that the work was not done by Greek artists, for the same situation prevails in Athens in the fourth century. From a technical point of view one point is significant. Huge fissures are not at all uncom-



mon, either because conditions of firing were imperfect, or spoiled pieces were preserved in Campania as sufficient for sepulchral use. The groups are listed as follows: A. Earlier groups, including Atticizing work, the Cassandra Painter, the Painter of Capua, the Parrish Painter, the Group of London F 500, the Archer Group; B. The Av. Group (fabric of Avella), of which the Danaid Painter is a member, and vases related to the Av. group, the Painter of London F 196, the Frignano Painter; C. The Caivano Painter and cognates, such as the groups of London F 223, the Errera Painter, the group of Oxford 459; D. Some skyphoi; E. Later groups, the C.A. (Cumae A) Painter, the Ready Painter, the A.P.Z. Painter (Apulianizing) and their companions; F. Some later Painters, the Lloyd Painter, the Ixion Painter, the Plouton Painter, the group of Capua Boreas, the Painter of Catania 737, the Rhomboid Group, two lekanai; G. Barbarized vases, which take in the Siamese Painter, the Majewski Painter, the Riccardi Painter, the Vitulazio Painter; H. A Sicilian series; and finally J, the latest Campanian Red-Figure, the T. T. (Teano-Tübingen) group, a hydria, the head-cruet class, and the Kemai group.

#### PAINTING

**Ancient Greek Pigments.**—EARLE R. CALEY reports in *Hesperia* xiv, 1945, pp. 152-156, a study made of ancient Greek pigments from the Agora by S. W. Midgley, Jr., and himself in 1935-36. Midgley made use of materials scraped mostly from objects of terracotta found in the excavations in the Athenian Agora, whereas the writer used in 1937 substantial specimens or small remains of bulk pigments found in vessels in which the pigments had been stored. Three tables describe, analyze and date the pigments found. They include red ochre, yellow ochre, malachite, blue frit, cinnabar, white lead, and chalk. Only the blue frit and white lead are clearly of artificial origin. Some of the pigments were undoubtedly imported products, such as cinnabar. The correlation between the pigments listed by Theophrastus and those actually found in modern excavations is remarkably good.

#### INSCRIPTIONS

**Fifth-Century Attic Inscriptions.**—BENJAMIN D. MERITT publishes in *Hesperia* xiv, 1945, pp. 61-133, seventeen groups of inscriptions found in the excavations in the Athenian Agora. They include four new fragments of the early Athenian

inscription which preserves certain regulations about the Eleusinian Mysteries (*IG. i<sup>2</sup>, 6*); two fragments belonging to decrees concerning Athens and Erythrai, now represented by *IG. i<sup>2</sup>, 10-13*; two fragments in praise of an allied city which belong with *IG. i<sup>2</sup>, 29*; a lease of public property; a fragment dealing with the colony at Brea; two fragments concerned with public works, perhaps with the Eleusinion; part of a monument containing a casualty list; decrees concerning foreign states, which now as fragment *a* is to be associated with fragments *b, c, d*, and *e* of *IG. i<sup>2</sup>, 141/42* and also with *IG. i<sup>2</sup>, 174*, and dealing with an Athenian covenant with Halieis; four fragments, of which three, previously known, are published as *IG. i<sup>2</sup>, 68/69*, and deal with exiles from Boeotia; a fragment concerned with Athens and Chios, close in date to *IG. i<sup>2</sup>, 58*; an inscription of ca. 423/2 B.C., treating money and banking, the changing of gold to the standard silver; a fragment of an agreement between Athens and Argos, ca. 417/16 B.C.; fragments dealing with the Hieropoioi and the Trieropoioi (soon after 410 B.C.), to be associated with *IG. i<sup>2</sup>, 122*; part of a decree; a proposal of the commissioners and a proxeny decree of ca. 407/06 B.C.

**The Argives at Tanagra.**—BENJAMIN D. MERITT publishes in *Hesperia* xiv, 1945, pp. 134-147, seven new fragments discovered in the excavations of the Agora from a monument which commemorated the Argives who fell fighting as allies of the Athenians at Tanagra. Five fragments had been previously known and published in *IG. i<sup>2</sup>, 931/932*, and more recently a transcript has been given in his *Greek Historical Inscriptions*, no. 28. Another fragment was found some years ago in the German excavations of the Kerameikos, giving part of a list of names. Werner Peek in *Kerameikos: Ergebnisse der Ausgrabungen* has now published this fragment, together with two of the pieces from the Agora and all five of the other fragments. Meritt now publishes these fragments with the five fragments from the Agora not included by Peek and suggests a pattern for the reconstruction of the stele.

**Interstate Agreements in Athenian Empire.**—R. J. HOPPER, using a passage from Thucydides i, 77 (καὶ ἐλασσούμενοι γὰρ ἐν ταῖς ξυμβολαῖαις πρὸς τοὺς συμμάχους δίκαις) as a point of departure, in *JHS. lxxiii*, 1943, pp. 35-51, discusses interstate juridical agreements in the Athenian empire. An examination of the available epigraphical evidence has led to the conclusion that



ξυμβολαί between Athens and her allies varied in significance according to the status of the ally concerned. In the case of the independent allies, and those other states far removed from the center of the empire, ξυμβολαί signified a mutual agreement regulating the trial of lawsuits in which an Athenian and a member of the other contracting state were involved; such ξυμβολαί were based on principles of equality between the two parties. On the other hand, ξυμβολαί between Athens and subject allies appear to have had a wider scope, for while they provided for the settlement of suits between an Athenian and a member of the state in question, the example of Selymbria (*IG. i*<sup>2</sup>, 116) shows that they contain other provisions, namely for the judgment of civil cases concerning members of the subject state alone. Evidence for inferring that Athens exercised undue interference in internal civil suits in the allied states has been given by the Histiaea decree (*IG. i*<sup>2</sup>, 41 and that relating to Miletus (*IG. i*<sup>2</sup>, 22).

**Greek Inscription from Persian Gulf.**—M. N. Tod in *JHS. lxi* (1943), pp. 112–113, publishes an inscription discovered by Miss Freya Stark on an island near the head of the Persian Gulf. The place of discovery is the island Failichah near the modern town of Kuwait. It read as follows:

Σωτέλ[ης]  
 Ἀθηναῖο[s]  
 καὶ οἱ στρα[τ]  
 Δι Σωτῆρι  
 Ποσειδῶνι  
 Ἀρτέμιδι  
 Σωτεῖραι.

The dedication is made to three divinities jointly, and is seemingly a thank offering for preservation from danger, such as deliverance from some peril of the sea. The lettering suggests a date of the latter part of the fourth, or the opening years of the third century. Tod is inclined to connect the episode with the famous expedition of Alexander's admiral Nearchus in 325 to 323 from the lower waters of the Indus to the head of the Persian Gulf.

**Two Inscriptions Near Athens.**—EUGENE VANDERPOOL publishes two inscriptions in *Hesperia* xiv, 1945, pp. 147–149. The first, a stele, found outside the church of St. Thomas, west of the main road from Athens to Amarousion and Kephisia, is concerned with a society (ἐρανος) whose name is not preserved. The date is about 52/1 B.C. The second is a stele, inscribed in letters

of the early fourth century B.C., contains the name Kniphon, a name which has hitherto been reported only once (*IG. i*<sup>2</sup>, 943).

#### NUMISMATICS

**Antiochus in 151/150 B.C.**—ALFRED R. BELLINGER in *Hesperia* xiv, 1945, pp. 58–59, discusses a bronze coin of King Antiochus struck in 151/150 (published by F. S. Heichelheim in *Hesperia* xiii, 1944, p. 363 f.) and expresses his conviction that of several possible conjectures, that of Haym has interesting possibilities. Haym believes that the sons of Demetrius I, Demetrius and Antiochus, had been declared joint rulers for separate parts of the empire during the war with Alexander. Bellinger maintains we are not sure that Antiochus was in Side in 151/150, but doubtless he was somewhere in Asia Minor. Wherever he was, it would have been easy for his father's mint official to join him and supervise the issue of a small bronze coinage of which this specimen only is known.

#### ROME

##### GENERAL AND MISCELLANEOUS

**Caesar's Invasion of Britain.**—In *CO. xxii*, pp. 53–54, JOHN B. DICKLOW discusses "Modern Aspects of Caesar's Invasion of Britain." He shows that many of the weapons and techniques used in this present war had their prototypes in that campaign. Caesar availed himself of the services of puppets and collaborators; in the actual invasion he used specially constructed landing craft, some of which even approximated the shipborne vessels used in the Allied amphibious operations. He employed his ballistae and catapults exactly as modern generals use artillery. His defense against the chariots of the Britons was exactly the same as our defense against tanks, to which the chariots may be compared. Both he and the British employed the "scorched earth" policy. His defense against native guerillas may be compared with that of the Germans in Russia, as he developed "hedghog" positions in much the same way.

#### POTTERY

**Ubiza.**—A note, in *Memorias de los Museos Arqueológicos Provinciales* 1942, p. 141, calls attention to an exhibition in the Archaeological Museum of this city in the Balearic Islands, of the development of ancient lamps. It begins with Punic examples, and extends through the Roman



period. A reorganization of the installation of the important collections of the Museum is in progress under a new Director.

### ROMAN BRITAIN

**Fires in Roman London.**—In *AJ.* xxv, 1945, pp. 18-79, G. C. DUNNING discusses the evidence, chiefly pottery, that leads him to believe that there were two great conflagrations in Roman London. The first was caused by Boudicca in A.D. 61; the second, apparently casual in nature, about A.D. 120-130. With the first fire may be connected 12 sites with burnt Samian, while 34 sites with burnt Samian are connected with the second fire. The most important of the second-century sites is that known as Regis House, a dump consisting of debris collected over a wide area. The pottery from this site is discussed in detail by the late T. DAVIES PRYCE. The article concludes with a technical report by E. M. JOPE concerning the action of fire on Samian ware.

### EARLY CHRISTIAN AND BYZANTINE

**Representation of Heaven.**—In *The Art Bulletin* xxvii, 1945, pp. 1-27, KARL LEHMAN discusses the "vision of heaven" as "depicted in painting or mosaic on domes, apsidal half-domes, and related vaulted forms. It is the culminating theme of the theological decoration of religious buildings from the beginnings of ecclesiastical art in the age of Constantine the Great throughout the entire development of Byzantine art," and continuing through all periods of Western art. "Though the idea of interpreting the ceiling as the sky may be the result of a general and not unnatural association and though it also found expression outside the sphere of Western art, the specific forms and the systematic approach of Christian monumental art far transcend such general associations. In all their specialized varieties and applications, the Early Christian patterns of heaven on vaults and ceilings are united by a common systematic, centralized and organized approach which is cosmic in the triple sense of the Greek meaning of this term: it combines decorative ideals of formal beauty with an order of speculative reasoning and the concept of a permanently established world." The author traces the development of ceiling decoration beginning with Etruscan tombs and shows its connection with the parallel architectural development of the vault.

**St. Brendan.**—In *CO.* xxii, 1945, pp. 56-58, ROBERT F. W. MEADER gives a sketch of the

wanderings of St. Brendan, or Brendanus, who was born in Ireland in 484 A.D., was early ordained priest, and became a great missionary, founding many parishes and monastic houses, and who died at an advanced age in 577. Two works in Latin are attributed to him, the *Vita* and the *Navigatio*. This latter deals with a voyage to a promised land, to which he set sail with a group of monks and others, returning after seven years to Ireland. The account of the actual discovery of this land is quoted, and the theory is advanced that the Saint was really the first discoverer of North America, "for archaeology now seems to be entering the lists in support of the theory." We know from the Norse sagas that Leif Eriksson found in Vinland people he called *Scaelings*, whose skins were white, whose faces were bearded, and whose language was Irish. They apparently lived in underground dwellings. The proposition has been advanced that the original landing place of the Norsemen was in the region of Portsmouth, New Hampshire. Within the past few years evidence has been discovered, lending credence to the theory of an early Irish settlement. At North Salem, N. H., a strange stone village has been found, consisting of a group of 15 or 20 houses or cromlechs. This settlement was known in Colonial times, as the records attest its existence, and make inquiries as to its origin. The site is described, as well as a similar one at Upton, Mass. These sites cannot be Indian, as the Indians did not use stone in building; nor, in all probability, can they be Norse, as the Norse architecture was of wood. But on the west coast of Ireland a precisely similar type of construction, apparently peculiar to this section of Europe, is found, and it is to be noted that the towns named Brandon, for the Saint, are all on the Irish west coast. The suggestion is therefore made that these sites, and the existence of the *Scaelings*, go back to the voyage of St. Brendan, and that he and his comrades were the original discoverers of North America.

**Islamic Incense Burners.**—In *The Art Bulletin* xxvii, 1945, pp. 28-45, MEHMET AGA-OGU discusses the use of incense in the Islamic world, and particularly one type of burner. "Corresponding to the wants of various strata of cultured societies, the incense burners . . . display in greater or lesser degree the artistic trends of the periods to which they belong, and are among the most notable decorative objects bequeathed to us from the past." The type of incense burner with cylindrical



body and domed cover particularly discussed differs in proportions and decorative features from known Coptic pieces, and is considered "to have been a Syro-Mesopotamian specialty." Probably "the Islamic craftsmen adopted the type, not from the Coptic art of Egypt, but rather from the ecclesiastic art of southeastern provinces of Byzance, where the Christian artistic tradition was preserved and cherished for a longer period of time."

### MEDIAEVAL

**Keltic Metal Work and Manuscript Illumination.**—DOUGLAS RENNIE HUDSON begins a study of this subject in *Metallurgia* xxxi, 1945, pp. 283-290 (10 figs., 4 in colors). Further studies will appear in future numbers of the above periodical. The need of the collaboration of experts on primitive jewelry and chemists to establish a proper chronology is emphasized. This article is preceded by an abstract of its contents, which may be quoted here. From critical assessment it appears that the Keltic style developed from Continental La Tène; the whorls, trumpets and scrolls may be correlated with Aegean patterns. Irish penannular brooches may be traced back to Halstatt and eventually to spectacle fibulae from the Balkans. Following St. Patrick's evangel, sublimation led to a vigorous mission throughout Europe, from Iceland to Italy. Foundation of famous monastic workshops led to a magnificent *floruit* about the ninth century, but the Christianization of Bavaria and Switzerland by the Keltic mission is better known. Red enamel, probably introduced about 200 A.D. from Wales, where yellow and blue also flourished, became characteristic of Irish monastic work. Designs in manuscript illumination, which led the world, are shown to be derived from the intricate patterns of metal interlacing, and the author suggests that decoration in red dots (to the exclusion of other colors) is a copy of the orange red spots in Irish *cloisonné*. Early Scotie metal tradition, which stood so high while Europe sank back into barbarity during the dark ages (400-1000) profoundly influenced Occidental craftsmanship for a millennium, not only in metal work but in the derived art of manuscript ornamentation, right down to the invention of printing from movable types. In the zoomorphic designs of hideous distorted lizards and birds the Keltic is modified by strong Teutonic influence. Four periods of Christian Keltic art are recognized—Vernacular Keltic (700-850) when La Tène patterns are displaced; Hiberno-Viking (850-1000)

when we find Keltic objects taken to the North; Later Animal Style (1000-1250); and Hiberno-Romanesque (1250 to the Norman Occupation) when the native art flickered and died out. By the eleventh and twelfth centuries, *champlevé* had practically displaced *cloisonné*. The "pernicious effect" of Roman influence is frequently emphasized.

**Easter Sepulchre.**—Under this title, WILLIAM H. FORSYTH publishes, in *BMAA*, n.s. iii, 1945, pp. 163-165 (2 figs.), a twelfth-century ivory relief, part of the Blumenthal collection given to the Metropolitan Museum in 1941, showing the visit of the three Marys to the Sepulchre, on which the angel is seated. The background suggests a church interior; over the Sepulchre hangs a crown light. The ivory is known to have been made in Cologne, and another ivory, showing the same subject, and in the Museum in Cologne, is illustrated for comparison. The article begins with a description of the depiction of this subject in the Easter liturgical drama of the Middle Ages. A brief bibliography concludes the paper.

**The Easter Candle.**—MARGARET B. FREEMAN takes the occasion of the recent acquisition of a Spanish paschal candlestick of the fifteenth century by the Metropolitan Museum, and its installation at The Cloisters, to describe, in *BMAA*, n.s. iii, 1945, pp. 195-200 (5 figs.), the ceremony of lighting the Easter candle in mediaeval Church ritual. Quotations from the Sacramentary in the Morgan Library (Italian of the early twelfth century) are given to illustrate the ritual, together with pictures of the blessing and lighting of the Easter candle, taken from Exultet rolls and other manuscripts. This Spanish candlestick is of wood, and is six feet five inches high. It is decorated with gilded carving, and with three rows of painted panels. The panels of the upper row are of representatives of the Old Testament—Ezekiel, Jeremiah, Zachariah, and the expulsion of Adam and Eve from Paradise. The lower register contains the Apostles—Matthew, Philip, Bartholomew, Thomas, Barnabas, and John. In the middle row are mediaeval saints—Benedict, Anthony of Padua, Bernadino of Siena, Francis, Louis of Toulouse, and Clara. Barring the fact that it is known to have come from Spain, there is no knowledge of its ultimate provenance. It was formerly in the Mackay Collection. The painted panels have been attributed by Professor Chandler R. Post to Jorge Inglés or his school, which was active in the latter half of the fifteenth century.

**The Secret of the Free-Masons.**—PAUL FRANKL and ERWIN PANOFKY expose the secret



formula of the mediaeval stone masons—how to take the elevation from the ground plan—in *The Art Bulletin* xxvii, 1945, pp. 46–64. The equilateral triangle served as the yardstick in the mediaeval period, since this standard professional accessory was at that time unknown. Frankl discusses in detail the preserved documents dealing with the measurements of the Cathedral of Milan. A mathematician from Piacenza, Gabriele Stornaloco, proposed the method of adapting the use of the equilateral triangle in this construction. A new English translation, by Panofsky, of a letter Stornaloco wrote on the subject, is appended.

### RENAISSANCE

**Greek History in Renaissance.**—A. M. WOODWARD examines the background and progress of the study of Greek history between 1350 and 1500, at intervals of fifty years, in *JHS* lxiii, 1943, pp. 1–14. He notes the landmarks associated with each of these dates, and touches on the main developments in each of the half centuries. The meeting of Petrarch and Boccaccio in Florence marks a noteworthy beginning in 1350. It is to Petrarch and Boccaccio that we must trace the impulse and demand for learning and devotion to Greek history, for the appointment of Pilatus as the first teacher of Greek in Florence meant the establishing of the tradition of that city as the center of Greek learning on Italian soil. In 1400 Manuel Chrysoloras was just ending his four active years as a teacher of Greek at Florence, which meant nothing less than the sowing of the seed for the harvest of Greek learning in Italy and the West. With the accumulation of manuscripts of Greek historians in Italy before the middle of the fifteenth century, of which those brought back by Aurispa were among the earliest, with the translations by Leonardo Bruni of Arezzo, a pupil of Chrysoloras, of Greek authors into Latin, especially the *Politics* in 1437, the position of Florence was unchallenged. In 1452 the completion by Lorenzo Valla of his Latin version of Thucydides was an important contribution. In the half century which followed the appearance of Valla's Thucydides vast changes were taking place in the whole setting in which classical studies were pursued. Patronage still existed, but there were many fewer patrons of outstanding enthusiasm or wealth; on the other hand, the rapid growth of printing brought an immense increase in the numbers of books in circulation and in the number of readers. A very small proportion of Italian incunabula prove to have any bearing on Greek history

(Woodward provides a list in an appendix), and there are scanty references to original contributions in the field of Greek history written in the fifteenth century. Yet it was in Italy that the essential foundations were laid for progress in the study of Greek history. Manuscripts were sought and assembled, translated into Latin, and finally printed. On the other hand, surprisingly little was built on these foundations by way of historical treatises. If we seek the reason, the answer lies in the word Italy itself, for it was the land dominated by the literature, the history, the monuments and to some extent, the law of Rome.

**Giovanni di Paolo's Presentation in the Temple.**—HARRY B. WEHLE publishes in *BMAA*, n.s. iii, 1945, pp. 185–188 (cover illustration and 2 figs.) the exquisite little panel of this subject in the Metropolitan Museum. He shows that it was part of the predella of an altarpiece, which has not been identified, but similar panels in the National Gallery in Washington, the Vatican, the Cleveland Museum, and Berlin can be brought together to form the entire predella, that in Berlin being the central panel. The debt of Giovanni to the paintings of the Presentation by Ambrogio Lorenzetti (now in the Uffizi) and Gentile da Fabriano (now in the Louvre) is shown, with the result that, while figures and backgrounds were taken bodily from these masters, the picture, nevertheless, produces an effect of charm; and it must be borne in mind that the patron, who gave Giovanni the order, may have insisted upon these borrowed motives.

**Portrait by Holbein.**—JOSEPHINE L. ALLEN publishes in *BMAA*, n.s. iii, 1945, pp. 161–162 (1 fig. and cover illustration in color), a portrait by Holbein, received by the Metropolitan Museum in the Altman bequest of 1913. It is identified as that of Margaret Wyatt, wife of Sir Anthony Lee, and was painted, according to the inscription on the portrait, in her thirty-fourth year. A date of about 1539 for the portrait is suggested. This would be in Holbein's last and busiest period, when he was court painter to Henry VIII. A sketch of Lady Lee's family is given, but little is known of her, save that she was the mother of five sons and four daughters, all of whom lived to maturity.

**Paintings in Strassburg.**—AUGUST L. MAYER, in *GBA*, ser. vi, xxvii, 1945, pp. 83–92 (12 figs.) calls attention to a number of paintings in Strassburg, whose importance, in his opinion, has not been sufficiently recognized. A *Descent from the Cross*, attributed by Berenson to Tintoretto, is



surely by his hand, and appears to be the design for a much larger painting, which was either never executed, or which is lost. Two other attributions to Tintoretto or his school (*The Adulteress* and *The Marriage of Cana*) are now given, on sufficient grounds, to El Greco, as youthful works. A *Venus*, *Bacchus* and *Ariadne* in Strassburg is a variant of the famous painting in the Palazzo Ducale at Venice, and may be a preliminary sketch for it. Another important picture in Strassburg noticed in this article is a *St. Peter and St. Paul*, with an alleged signature of Ribera; this signature is probably a forgery, and the real painter is considered to be Pietro Novelli. Another painting, *Boy with Crayfish*, previously attributed to Mattia Preti, in Strassburg, is now assigned to Giovanni Serodine. Finally a lost painting by Tintoretto, showing a young prince being carried to Heaven by angels, is discussed. Venturi believed this prince to be Alessandro Farnese; this is denied, and he is identified as St. Aloysius Gonzaga, a member of the family who were Tintoretto's chief patrons. He was born in 1568, and died as a young man in 1591. He entered the Jesuit order in 1585, and was beatified in 1605. He was finally canonized in 1726. The identification is made certain by comparison with known portraits of this young man, particularly one in Vienna.

**Flemish Tapestries.**—In *BMA*, n.s. iii, 1945, pp. 172–175 (3 figs.), JOHN GOLDSMITH PHILLIPS calls attention to two magnificent Flemish tapestries recently purchased by the Metropolitan Museum. Their history is known, as they formed part of a series representing the Passion of Our Lord, made either for the famous Elector Maurice of Saxony (d. 1553) or for his successor, Elector Augustus. They hung in the Palace in Dresden till 1701, when the building was destroyed by fire. In the 1850's, six hangings that survived the fire were exhibited in the Dresden Picture Gallery, where they remained till 1911, when they were removed from exhibition. In 1928 the two in the Museum were brought to America by their owner, Prince Ernst Heinrich of Saxony, and sold to a New York dealer. The tapestries portray the Last Supper and the Ascension. The design of the Ascension appears to be unique in tapestry, but the Last Supper appears on many other examples. It is suggested that they were designed by Michel Coxcie, who worked in this field from 1543 to 1567. A set of tapestries in Madrid, which seems surely to have been designed by him, shows so many similarities in draughtsmanship that the attribution seems very certain.

**Man with a Pipe.**—The Fogg Museum acquired in 1941 a portrait, called *Young Man with a Pipe*, which is published by JAKOB ROSENBERG in *Bull. Fogg Mus.* x, pp. 80–86 (5 figs.). Previous attributions to Vermeer and Carel Fabritius are denied, and it is claimed to be a self-portrait by Barent Fabritius, Carel's younger brother. Other portraits of this artist, two of them known to be self-portraits, and one perhaps by Carel, in Vienna, Munich and Aachen, are conclusively shown to be portraits of the same subject. This portrait was painted, in all probability, about 1645, just before Barent joined Rembrandt as his assistant and came under his influence. He was then in his early twenties, and under the influence of the School of Utrecht.

## AMERICA

**Discovery of Brazil.**—The theory advanced by many (principally Portuguese) scholars, scientists, and seamen, especially Admiral Coutinho of the Portuguese Navy, that Brazil was already known to Portuguese navigators when Cabral landed on its shores in 1500, is examined by ALEXANDER MARCHANT in *Geog. Rev.* xxxv, 1945, pp. 296–300. After studying and weighing all the evidence pro and con, he rejects the theory as insufficiently proven.

**Spanish Campaigns Preceding Conquest of Peru.**—*Geog. Rev.* xxxv, 1945, pp. 321–322, publishes analyses of two studies that have recently appeared, by writers working independently of each other, and without mutual knowledge, on this problem. The first is by Captain FERNANDO ROMERO and EMILIA ROMERO DE VALLE (Lima, 1943), the second by ROBERT CUSHMAN MURPHY (in *Hispanic Am. Hist. Rev.* xxi, 1941, pp. 3–28). The conclusions reached are in substantial agreement, but differ in certain details. In their access to sources not available to Murphy, the Romeros have been able to present, in many cases, a sounder approach to the problems involved. "Taken together, these discussions solve most of the uncertainties."

## FAR EAST

**Chinese Bronzes.**—In 1944 the Fogg Museum received a gift of a collection of thirty-seven Chinese archaic bronzes, from an anonymous donor, which had previously been exhibited on loan. This new gift, combined with over thirty received from the Winthrop bequest, places the Fogg Museum in the front rank in this field. Selected examples from this recent acquisition are



published by BLANCHE MAGURN in *Bull. Fogg Mus.* x, pp. 87-92 (6 figs. and cover illustration). They belong from the latter part of the second millennium B.C. to approximately the beginning of the Christian era. Most of the specimens illustrated belong in the Chou Dynasty. The bronzes were cast either by the *cire-perdue* process, or from clay moulds—such moulds having been found in excavations associated with bronzes. The bronzes were used in ceremonies. The earliest to be illustrated is a Late Shang or Early Chou (thirteenth to tenth century B.C.) beaker of the type *Yu*. Perhaps slightly earlier is an Early Chou bowl of the type *Kuei*, dated between the twelfth and the tenth century B.C., cast in one piece, and signed by the maker Tê. Another *Kuei* of the Late Chou period (seventh to third century B.C.) bears no inscription, but is a typical example of its period. A cooking vessel of the type called *Li* belongs in the Middle Chou period (tenth to eighth century B.C.) and consists of a brazier, on which a container is placed. It bears an inscription (illustrated) with the signature of Chi Chêng. It has long been known, as it had been in a private collection in China from 1835 to 1902. To the same period belong two splendid pairs of gilt bronze pole tops (one pair illustrated on cover) with stylized decoration. There is one mirror, of much later date, belonging in the Sui Dynasty (sixth to seventh century A.D.) the reverse of which is decorated with reliefs of birds and animals, and a long poetical inscription. All the objects selected for publication are carefully described, and a series of notes at the end of the article give source material and other information.

**Kuo Ch'in Wang Brocades.**—LINDSAY HUGHES continues the study of the textiles from the tomb of Prince Kuo Ch'in Wang in *G.B.A.* ser. vi, xxvii, 1945, pp. 65-82; 23 figs. (see *ibid.*, xxiv, 1943, pp. 129-148, summarized in *A.J.A.* xlviii, 1944, pp. 200-201). The textiles here described and published are all in Kansas City, and consist for the most part in wall-hangings and protective wrappers for gifts. One piece of satin, brocaded with gold thread *Dharanis*, appears to be from the shroud that covered the body of the prince. These are Sanskrit phrases in the Tibetan alphabet—Lamaism was the state religion of China under the Manchu rulers. Analysis shows that the hangings were attached to the walls of the tomb with silver nails. The designs of the different brocades fall into two groups—representations of dragons, and floral patterns with the lotus and chrysanthemum predominating. With the exception of

the wrappers and one other textile, which are of twill, all are of satin weave. The weaves are described, and the different patterns carefully treated. The tomb dates in the year 1738.

#### U.S.S.R.

**Encolpions and Crosses.**—In *G.B.A.* ser. vi, xxvii, 1945, pp. 93-104 (18 figs.), EUGENE DE SAVITSCH describes the rôle of the cross as part of the wearing apparel of the early Russian Christians. At first not obligatory, it became a general custom, and even as a rule prescribed by the Orthodox Church. Various customs are mentioned, in which the exchange of crosses figured. The pectoral crosses are of two types, folded and single. The folded ones consisted of two joined together by a hinge, to enclose holy relics. This type was always worn on the bosom, hence its name encolpion. The single cross was worn next the skin, directly on the body. Very few encolpions have come down to us intact. The usual pattern is to have a reproduction of the Crucifixion on one side, and the Virgin and Child on the other. In the collection of the writer are eight complete encolpions and parts of six others. One has Slavonic inscriptions and dates in the thirteenth century. One has, associated with the Crucifixion, a representation of St. Nicetas smiting the Devil. Others have other saints and angels, to whom powers of divine healing were attributed. From the beginning of the fourteenth century the making of encolpions diminished, and virtually disappeared, and they were replaced by single pectoral crosses with reliefs on both sides. Two kinds of altar crosses are used in the Russian Church—one, a processional cross, which, when not in use, stands behind the altar table; the other is kept always on the altar, and is used by the priest in blessing the congregation after the service. Both have only the Crucifixion represented on them, but their shape varies, the earliest known having only three or four points, but later, depending on the location of the beams for the inscription above, and for the feet of the Saviour below, having as many as eight. A number from the writer's collection are described and illustrated. Sometimes Christ is alone, more often He has His Mother and St. John as onlookers. Later crosses, of the seventeenth or eighteenth century, have Him accompanied by angels and the dove of the Holy Spirit. All the pieces in the collection have been identified with known duplicates from the same molds, belonging to Museums and collections in Russia, which are listed at the end of the article.



## BOOK REVIEWS

MÉMOIRES DE LA MISSION ARCHÉOLOGIQUE EN IRAN. TOME XXIX. MISSION DE SUSIANE. ARCHÉOLOGIE SUSIENNE, by R. de Mecquenem, G. Conteneau, R. Pfister and N. Belaïev. Presses Universitaires de France, 1943.

The excavations at Susa are among the most important in the Near East. They have been conducted from close to the beginning of Near Eastern archaeology to the outbreak of the war, a period longer than that devoted to any other site. This continuous effort has been amply repaid by the discovery of a perhaps unbroken series of cultures from the prehistoric village of Susa I down to Islamic times. Only a continuously important site could afford the archaeologist such a series of artistic and historic treasures. Yet the wealth of the site and the labor of the archaeologists through the years have never received the reward they deserve, adequate and comprehensive publication. Many volumes have appeared with monographs on objects or series of objects of the greatest import for the ancient history and art of Iran and Mesopotamia; but a comprehensive report on stratigraphy or a detailed stratigraphic study of various types of objects is yet to be published.

It is therefore with some slight regret that the archaeologist will begin with the major monograph by M. de Mecquenem, a one hundred and fifty-eight page sketch of six years work since 1933 at and near Susa. The regret is lightened, however, by the promise of separate studies on some of the more important phases of the work. Even another summary account of stratigraphy is welcome because of the importance of Susa, though it leaves one eager for the whole story which can only appear from detailed studies.

M. de Mecquenem first discusses further work in the second sounding of the Acropolis. The sequence of Susa I through Early Dynastic I is confirmed. Noteworthy are the following points. An investigation of the Susa I necropolis reveals that burials are secondary, corrects de Morgan's statement that the bodies were buried extended, and reduces the size of the necropolis to 120 m. square. A study of Susa I remains by M. Le Breton is promised. Quite a number of stamp-seal impressions, some of which have been published in *L'Anthropologie* xlviii, are shown in fig. 6. The designs are unusual and apparently date to some

part of the Uruk period. A study of Proto-Elamite seals and seal impressions is promised, in which, it is to be hoped, their provenance will be given.

Two further soundings are briefly mentioned, one in the Hypostyle Hall of the Apadana, the other in its west portico where interesting late Elamite frit objects were discovered.

Pages 41-62 are devoted to further work in area I of the Royal City. The stratigraphy here is: Arab; Sassano-Parthian; Late Elamite and Neo-Babylonian with an Elamite necropolis from which pottery groups of three tombs are given; Ur III: a temple with which terracotta lions were associated was found here. Around the temple were numerous sarcophagi containing cylindrical pots with incised, encrusted designs and various metal objects, some of which are pictured. Below this were tombs of the Akkadian and Early Dynastic periods.

Area 4 of the Royal City revealed Arab through Neo-Babylonian levels. The noteworthy finds were hoards of coins published in *Revue de Numismatique* 1935, pp. 155-62, and a fine Parthian stone head, two views of which are shown on pl. VIII.

A sounding on the Isthmus between Donjon and the Royal City is briefly treated. The levels here were Arab, Parthian, Neo-Babylonian and Elamite. The finest find was a Parthian female head studied by M. Franz Cumont in *Compte Rendu des Séances de l'Académie des Inscriptions et Belles-Lettres* 1939, pp. 330-41.

The major part of M. de Mecquenem's contribution concerns excavations in Donjon. Several pages and a plan are devoted to a Parthian palace preserved in its foundations only. Unfortunately the plan is too small and the description rather general to give a good idea of the plan of the palace.

This section is followed by the most comprehensive description yet to appear of the necropolis of Donjon which seems to range from the Elamite period through Early Dynastic I. A plan and section of the graveyard and descriptions of approximately 641 tombs are given. Seven full-page figures and many smaller figures show types of sarcophagi, pottery and other objects from the tombs. It is unfortunate that many of the references to the figures do not distinguish whether the



object referred to is of the type of the figure or the figure shown, that the seal designs pictured are not attributed to specific tombs, and that the excavators were not able to give their own stratigraphy of the tombs. Despite these disadvantages enough material is described so that a tentative picture can now be drawn of the changes in material culture at Susa over a long period. The tombs deserve, however, a volume to themselves with more detailed illustrations, at least as good as those of the Tepe Giyan tombs published by Conteneau and Ghirshman in *Fouilles du Tépé-Giyan*. The account of soundings at Susa ends with a brief description of Parthian and later deposits found in the City of the Artisans.

M. de Mecquenem then presents a most useful map of the sites in the Susa region with a brief description of each. Tepe Bouhallan is treated in some detail. Its pottery shows close connections with Fars, but not enough is published to link it with particular phases at Tall-i-Bakun A or B. No influence from the Mussian region is shown.

M. de Mecquenem concludes his section of the volume with a general study in which he would temporally equate Susa I and Sialk II. The reviewer has previously presented his reasons for considering Susa I and the end of Sialk III contemporaneous (McCown, "The Comparative Stratigraphy of Early Iran," pp. 19 f., 26, fig. 9 and notes, *SAOC*, 23, Chicago, 1942). The weaknesses in M. de Mecquenem's arguments seem to lie in too much dependence on a comparison of depths of deposit at sites considered, very general similarities between Susa I and Sialk II, an assumption that there is no break in continuity between Sialk III and IV, and failure to take into account the basic differences in culture of Sialk II and Susa I.

Under the general cover title, "Monuments Divers," M. Conteneau discusses "Fragments de Kudurru," the interpretation of symbols of the gods with a description and plate of S<sup>n</sup>783 and descriptions of S<sup>n</sup>791-802; "Céramique Susienne;" "Collections Iraniennes de Céramique," a brief discussion of sherds from Tepe Chashmah Ali; "Profils Susiens," an essay on an Elamite terracotta head; "Tête d'Homme d'Époque Parthe," a study of a Parthian head; and "Bandage de Roue en Bronze—Fragment d'Écuelle en Bitume."

The major essay is that on Susian pottery. M. Conteneau's thesis is that the pottery design of Susa II (of the Akkadian and Early Dynastic

periods at Susa) is influenced by the design of Susa I, as a result of the continued existence of "Susa I" through the Uruk and Jemdet Nasr periods. At the known, excavated sites there is, however, little doubt of breaks in continuity, at Giyan between V and IV and at Sialk between III and IV; while at Susa the second sounding of the Acropolis reveals remains during the Uruk and Jemdet Nasr periods for a depth of ca. 8 m. In the Uruk levels no painted pottery is found, while the rare, simple design of Jemdet Nasr levels is not relevant. The source of painting and polychromy in Mesopotamia in the Jemdet Nasr and Early Dynastic periods and in Iran in the latter period is a most interesting problem in which the painted pottery of Baluchistan and the Indus Valley must also be considered. It is indeed possible that small pockets of the buff ware culture (of which Susa I was part) continued to exist separately or alongside newer cultures in isolated sections of western Iran during the Uruk and Jemdet Nasr periods. Evidence for this is, however, yet to be found.

R. Pfister contributes a technical study, "Textiles à Suse," analyzing cloth preserved on copper or bronze objects of Susa I and Ur III. The volume is concluded by Col. N. Belaïew's monograph, "Poids en Forme de Cloche."

PARIS

DONALD McCOWN

THE TOMBS AND MOON TEMPLE OF HUREIDHA (HADHRAUT), by G. Caton Thompson, F.S.A., Oxford, 1944. Pp. xv+191, pls. LXXXI. Printed at the University Press, for the Society of Antiquaries of London. (Reports of the Research Committee, No. XIII).

None can ever underestimate the power and efficiency of the three British women. Misses G. Caton Thompson, Freya Stark, and Elinor Gardner, expert field workers, bent on severely practical archaeology. The first had since 1929 studied the question of Arab influence in southeast Africa. The second had already visited Hadhramaut and described that little known land and people in an interesting book: *The Southern Gates of Arabia*. The third was occupied with problems of geology, irrigation, plans, and photographic records. Their venture in South Arabia was primarily a British concern, enlisting the support of Lord Wakefield, the Royal Geographical Society, the FitzWilliam Museum, and the Museum of Archaeology and Anthropology in Cambridge, the Ashmolean Museum of Oxford, and the valued



help of British specialists. The Oxford Press even cut a new font comprising 80 forms towards an exact publication of the south Arabian Himyarite inscriptions. Professor G. Ryckmans, the noted Louvain epigraphist, was the only outsider.

On November 7, 1937 the party landed at Mukalla on the south coast of Arabia, and from there began their journey towards the interior and the great Wadi Hadhramaut, the seat of an Arab kingdom in pre-Islamic and pre-Christian centuries. On December 20, 1937, they reached Hureidha, a modern village in Wadi 'Amd, a southern branch of the great Wadi, and there, in incredibly short time, a little over two months—December 24, 1937 to March 3, 1938—they discovered, excavated, and recorded the first Moon Temple ever known in Arabia, a farmstead nearby, and two ossuary cave-tombs of contemporary builders, worshippers of Sin of Madâbum, the ancient town to which Hureidha is the unknowing heir. The spoils from the Temple included 58 stones bearing inscriptions in Himyarite characters and in the Hadhramautic dialect, among which two are in Sabaeen, and 20 are dedicated to the Moon God Sin. From the cave-tombs came 87 intact pottery vases, of 15 different types, all new and without contemporary parallel. And, besides, in the richer of the two cave-tombs were recovered two stone seals which help to date both Temple and cave burials in the seventh or sixth century B.C. The first, scaraboid-shaped, is an agate seal in silver mounting. On the flat side is engraved a lion-headed figure in long robe. Its left hand is raised, holding a string of beads; its right is extended over a three-petal plant. The second is a double-sided seal in kaolite. On one side is engraved a winged hero holding two animals by the hind legs; on the reverse, a nude human figure kneels between rampant animals. Both derive their inspiration from original models in Mesopotamia; even though somewhat debased by provincial art, they are clearly dated in the late Assyrian, Neo-Babylonian, and Persian Achaemenid periods. (H. Frankfort's report, pp. 101–103).

Another lower date in the Hellenistic-Seleucid period is supplied by the limestone incense burners, small square troughs on four feet, engraved and inscribed, which appear in the remains of the small shrines built outside the main Temple (probably in ruin after a last reconstruction) in the third century B.C. These dates are confirmed by a comparison of the stone and glass beads found in

the tombs, with the well established series of Syria and Palestine. (H. C. Beck's report, pp. 96–101).

The Persian influence reaching Hureidha-Madâbum, in the Achaemenid period, is admitted by Miss Caton Thompson, while she insists that: "it would be folly to overstrain the limited evidence of one small site, incompletely excavated, by attempting prematurely to fit it into its larger historic setting." Anyhow, even as "an isolated unit of archaeological fact in the obscure and undated history of the ancient kingdom of Southwest Arabia," it has a positive value, and deserves our thanks. Indeed, the 87 pots found intact in the tombs are in her own words: "the long awaited nucleus for a South Arabian Corpus," even if their quality is not high. Also in connection with her Type IX: "cups with convex bottoms and four ears, in that curious black stone ware," it may be interesting to signal among the Luristan bronzes in the University Museum two bronze cups with four flat ears and rims (CBS. 32-41-229; 32-41-230). One cup rests on three small feet, and has one ear hollowed for pouring (diam. 9 and 10 cm.; ht. 4.5 cm.).

Let us look over in some detail the Temple of the Moon God, Sin of Madâbum. From the beginning, it is in the main a rectangular platform, 12.50 x 9.80 m., with one angle oriented East, within a retaining wall 4 m. high, made of quarried boulders and with a slight batter, and capped with oblong coping stones. The filling is made of boulders and rubble; the top pavement set in plaster was often repaired and raised. The entrance stairway was on the southwest front. That front disappeared below two later extensions toward the southwest (Phase B: 2.60 m.; Phase C: 2 m.). In the last front reconstruction, two stairways at the south and west angles led to forecourts—orientation of one angle east is a Mesopotamian tradition; coping stones find parallels in Greece, Asia Minor, and Syria. The southwest entrance is a local trait.

On the platform only five stone pillars are left from the first, or more probably the second, building phase. They may be the bases of wood pillars of the central shrine. The only ritual object *in situ* is a limestone offering table, with a bull's head gargoyle-like projection. Inscriptions on pavement or walls have all been removed and reused in later constructions. Even after the large platform was no longer in use, on the extra-mural pavement before the third front a number of small stone shrines and altars prove the survival of the pagan



astral worship of the Moon God: baetyls, carved images, incense-burners, offering dishes, columnar décors, pottery, crowd the area about the altars and benches made of reused inscribed stones.

Professor G. Ryckmans has translated—in French—the inscriptions and graffiti from temple, tombs, farmstead, and rocks of neighboring localities (83 in his catalogue) and qualifies them as “un lot relativement considérable d’inscriptions sur un site archéologique déterminé,” which means real progress toward systematic exploration.

That the edition could be printed and published during the war, is in keeping with the spirit of the authors. We are pleased to note their association with the Society of Antiquaries of London, which earlier showed its devotion to the Moon God of Ur.

L. LEGRAIN

UNIVERSITY MUSEUM, PHILADELPHIA

**PATTERNED TEXTILES IN PHARAONIC EGYPT**, by Elizabeth Riefstahl. Pp. 56, figs. 56. Brooklyn Museum, Brooklyn Institute of Arts and Sciences, 1944. \$1.00 (\$0.80 for Members).

At the outset of her study Mrs. Riefstahl indicates her conclusion by emphasizing the scarcity of patterned textiles in Pharaonic Egypt, both in actually preserved examples and in representations on reliefs and paintings. As an introduction she describes the main articles of Egyptian clothing to facilitate the later discussion.

The main part of the monograph is taken up by a study of all preserved pieces as well as of representations of patterned textiles. The result is a sort of inventory of all known pieces from Pharaonic Egypt, with a discussion of various problems arising therefrom.

From the entire period of the Old and Middle Kingdom only a single patterned textile exists. It was discovered in a tomb of the Eleventh Dynasty and is a looped piece of linen with a design of stripes and zig-zags. Other patterns are represented in sculpture and paintings but it is not even possible to be certain that they represent patterned textiles and not, for instance, painted leather.

The New Kingdom has yielded the largest number of patterned textiles, among them the great find in the tomb of Tutankhamun. Of course, this immediately brings to mind that this is Egypt's period of imperial expansion and conquests, and thus the question: are patterned textiles a foreign importation to Egypt? This

problem is taken up by Mrs. Riefstahl, who analyzes the various motifs and techniques as well as other factors. She seems to incline to the view that color and pattern in textiles of Pharaonic Egypt are foreign importations.

From the Eighteenth Dynasty on, the record of existing patterned textiles is very scant. With the exception of the so-called Girdle of Ramses and a few insignificant pieces, not a single patterned cloth of the late period has survived. In this, as well as the earlier periods, all representations of what seem to be patterned fabrics may often have been bead work, matting or leather.

Actual textiles appear again during the Roman and Coptic periods, but they have little that reminds of Egyptian traditions. They carry on Hellenistic motifs and belong to the late classical international style.

The conclusion is almost inevitable that patterned textiles were something exceedingly rare in Egypt throughout her long history, except perhaps during the New Kingdom when they—or the fashion for them—were very likely imported from the East. One's impression that the Egyptians wore white almost exclusively is therefore borne out as a “strong possibility.”

MUSEUM OF ART

HERWIN SCHAEFER

RHODE ISLAND SCHOOL OF DESIGN

**FOUILLES EXÉCUTÉES À MALLIÀ. TROISIÈME RAPPORT. EXPLORATION DU PALAIS. BORDURES ORIENTALE ET SEPTENTRIONALE (1927, 1928, 1931, 1932)**, by Fernand Chapouthier et Pierre Demargne. Pp. viii + 77, figs. 47, pls. 55, plan 1. Librairie Orientaliste Paul Geuthner, Paris, 1942. 250 fr.

The third report of the excavations of the École Française d'Athènes at the palace of Mallia in Crete gives the results of the campaigns of 1927 and 1928, during which the whole of the eastern and northern borders of the palace were uncovered, as well as of supplementary explorations in these regions during the campaigns of 1931 and 1932. Following the plan used in previous publications, the report is divided into three parts: 1) Description du palais, 2) Mobilier and 3) Conclusions.

The principal element to the east of the Central Court of the palace is the group of six magazines and an entrance corridor which comprise Quartier xi. All the magazines open on a long corridor, the east wall of which is part of the outer wall of the palace. Low platforms run along the partitions



and continue around their butt end; a similar platform runs along the east wall. All are carefully built, bordered by drains which empty into sunken collecting vases. Of the brick upper part of the partition walls there are some remains and the bricks average 0.60 m. x 0.40 m. (the thickness is not given).

Quartier XII, to the south of XI, is much narrower than the latter and there is thus a sharp setback in the exterior wall. The group of three rooms is a smaller version of Quartier XI in plan. South of it there is a corridor connecting the Central Court and the southeast entrance to the palace. The entrance was closed by a double door; on the exterior this entrance was apparently flanked by columns, the base of one of which was found in situ. South of this entrance the east wall of the palace was cleared for some way.

The long stretch of the eastern exterior wall which runs along Quarters X-XIII was built of large rough blocks of blue limestone, sometimes extending through the entire thickness of the wall, which were laid with some regularity. This is in marked contrast with the carefully cut and very regularly laid conglomerate blocks of which the west palace wall was built. In the rather deep setback at the southern end of Quartier XI there was added a bastion which presumably was to protect this angle and the southeast entrance to the palace. Another such bastion occurred in the setback north of Quartier X. Farther to the north the east wall is broken by two entrances, one leading to a single room and the other opening into a corridor and through it to the North Court.

In the northwest section of the palace a considerable area was cleared. The north wing of the portico of the North Court was uncovered and to the west of this court was found a small isolated quarter consisting of four rooms. The most striking feature of this section of the palace is the very carefully built and paved double vestibule. A double door closed the entrance from the exterior to the outer vestibule; a single door at right angles opened into the inner vestibule, which led to the North Court. Running westward from this entrance is a beautifully paved causeway, which was followed for about 35 m. South of this causeway was a large esplanade with porticoes on the south, and probably on the east as well. Here especially, and in many other places in the northern section of the palace, there is clear evidence for two major periods of occupation.

The finds in the palace also clearly show two

periods. Most of the pottery reported here comes from the later phase, dating MMIII-LMI, but there is also some pottery from the earlier palace. The pottery of the first period is very fragmentary, but that of the second period is less mutilated and includes many interesting vases. Rippled ware is especially abundant at Mallia. Besides the smaller vases, two great pithoi were found, one belonging to each of the periods. Among other objects of terracotta is a good series of lamps, a six-legged vessel (here called a "trépied"), a multiple vase with four receptacles, two different types of supports for spits or skewers, a complete "Horns of Consecration" and a clay imitation of a large shell.

The most important of the stone objects is a series of moulds, for the casting of bronze weapons and utensils, which came from an atelier of bronze workers and vase drillers found in the northern part of the palace. Various stages of the working of the stone are represented in numerous unfinished pieces. There are three two-piece moulds for double axes and halves of three others; one mould has four faces with cuttings for casting different tools and there are three moulds for casting large flat discs. Besides the moulds from the atelier, there are other stone objects found about the palace, including some vases, a very good double lamp and three seals. One very interesting seal belonging to the first period seems to show a figure seated on a bench before whom are two rows of large vessels.

Several characteristics of the palace at Mallia are pointed out in the Conclusions. Most important is that the palace of the later period, while apparently a unit, is still an aggregation of small isolated quarters, each with its own entrance from the outside or from a court, which is only loosely bound together by the outer wall. For this reason the plan of the periphery of the palace presents a series of salients and setbacks, and the outer wall is broken by several doorways. At Mallia there is no evidence of a theatral area, but the Central Court probably served this purpose also. There is still no evidence for the use of light wells and the various storage and work rooms of the ground floor must have been quite dark.

Although two periods of the palace have been suspected before because of the two main groups of pottery found all over the palace, it was only in the northern part of the palace that architectural remains of two structures that could not be co-existent were found. These not only confirm the two periods previously hypothesized, but also



show clearly that the earlier structure was a palace similar in many respects to the later palace. In fact, it is suggested that some quarters of the later palace, especially XXVIII and XI, might have been incorporated from the earlier palace. The general chronological conclusions of the second report remain unchanged: the site was occupied as early as the Neolithic period, the earlier palace belongs to EMIII and MMI, the later palace to MMIIIB and LMIa and the site was abandoned in LMIb.

With the completed picture of the north and east wings of the palace given in this report, there remains only the fourth report on the southern wing to finish the description of the palace. Like the earlier reports, this third one is clearly and adequately presented and very fully illustrated with numerous text figures and excellent plates. Unfortunately, the practice in earlier volumes of putting the plan at the end and on a large extension sheet was not followed here, which makes it difficult to use the plan while reading and impossible to use the plates while the plan is opened out. Certainly the importance of the palace at Mallia grows as successive reports are issued and it is with increasing interest that archaeologists await further information on this center of Minoan civilization.

PARIS

SAUL S. WEINBERG

A CONTRIBUTION TO THE PROBLEM OF THE MINOAN SCRIPT, by *Const. Dem. Ktistopoulos*. Pp. 20, table. N. Tilperoglou, Athens.

This short work devotes fifteen pages to listing specific words chosen from the inscriptions of Linear Class B at Knossos, and from the inscriptions of Pylos, Thebes and Eleusis. These words are transliterated according to the hypothetical values assigned to the signs of the script in a table given at the end, and compared with similar words connected in some way with ancient Crete, pre-Hellenic Greece, or Egypt. The author feels that the number of such equations (more than 135) justifies the phonetic values he assigned to the signs.

His method of deciding on these phonetic values is described in the preface (p. 3): "In order to determine the phonetic values of the various signs I took in consideration some signs of the Cypriote syllabary as well as some letters of the Egyptian, the Greek and the Phoenician alphabets on the one hand, while on the other hand I have had recourse to an inter-correlation of various sign-

groups of the Minoan inscriptions and to combinations agreeing with the names of cities or of persons of the Minoan period, of the Greek mythology and generally of the ancient times. . . ."

This statement in itself invalidates the entire work. If pre-Hellenic words were used in determining the values assigned to signs, it is hardly surprising to find that the transliterations resemble the words with the help of which they were constructed. It is exactly this sort of reasoning that produced works "proving" that the language of ancient Crete was Greek, Basque, Semitic, etc. It is reasoning in a circle with a vengeance.

Two objective tests can be used to judge the validity of any attempt at deciphering an unknown language. First, the phonetic pattern of the language as revealed by the suggested values for the signs can be examined. If the pattern looks reasonable, and is fairly similar to the phonetic pattern of the language with which relationship is claimed, there is a likelihood that the suggested values are for the most part correct. Second, the words produced by transliteration can be compared with the words to which they are presumably related. If the two languages are not identical, the words of one group should differ more or less from the words of the other group, according to fairly definite laws, and a certain regularity in the changes should be discernible. This does not mean that the first decipherer of an unknown language should work out all the phonetic laws involved, but merely that the transliterations should show that some such laws exist.

Let us apply these tests to the work under discussion.

#### 1. *The Phonetic Pattern.*

The table lists 64 signs. Estimates of the number of signs in the script vary, but this number is probably fairly correct. From the phonetic values assigned, it can be inferred that we have a syllabary consisting of open syllables, in consonant-vowel combination, and five vowels. One inconsistency is immediately apparent. Seven signs are assigned pure vowel values, two each for *a* and *e*, and one each for *i*, *o* and *u*. When the consonant-vowel signs are examined, however, no doublets are listed for *ba*, *be*, *sa*, *se*, or for any other consonant combined with *a* or *e*. No explanation is given for this.

The pattern is full of gaps. Combinations that are frequent in the so-called pre-Hellenic words in Greek sometimes do not appear at all in the table. The pattern for the labial, guttural and dental



stops illustrates this very clearly. The following values appear:

|     |   |    |    |    |
|-----|---|----|----|----|
| ba  | be  |    |    | bu |
| pa  | p(h)e   | pi | po | pu |
| pha | p(h)e   |    |    |    |
| ka  | ke  |    | ko | ku |
| da  |   |    |    |    |
| ta  | te  | ti | to | tu |
| tha | the   |    |    |    |
| tta | (the only example of a double consonant in the table) |    |    |    |

This is certainly strange. We are expected to believe that a language which had voiced, voiceless and aspirated stops for labials and dentals had only the voiceless guttural, and even that never in the combination *ki*. It is even more amazing when we look at the signs to which *k*-values are assigned; they are comparatively rare in the extant inscriptions. The conclusion is that gutturals were seldom used in the language. Yet *k* is very frequent in pre-Hellenic words; it may even be the consonant used most often.

Many other criticisms can be made of the phonetic pattern, as presented in the table.

## 2. The Words.

Here the results are equally unsatisfactory. In spite of the fact that the words with which the transliterations are equated must often have been the very words on which the phonetic value given to the signs depends, no regular phonetic relationship between the transliterated words and the Greek words can be found. One illustration should suffice to show this. On page 6 four transliterated words taken from the same inscription contain the sign with the hypothetical value *ra*. Of these, *a-ra-tta-sho* is equated with Ἀραττήν, *lo-ha-ra-no* with Λέωνη, *phe-ra-he-she* with Φ/Πραισός, *a-ra-sa-no* with Ἀρσινόη. Elsewhere *ra* is equated with ρε, ρη, ρι, ρο and ρυ. Similar variations can be cited for most of the other signs.

Many other objections can be made with regard to this attempt to decipher the script of Linear Class B. While some of the phonetic values assigned to the signs may be justified, on the whole the attempt cannot be taken seriously.

BROOKLYN COLLEGE

ALICE E. KOBER

CHRONOLOGIE DELPHIQUE, by Georges Daux. École Française d'Athènes: Fouilles de Delphes; III, Épigraphie (fascicule hors série). Pp. 133. E. de Boccard, Paris, 1943, 300 fr.

In spite of the vicissitudes of war the fascinating puzzle of the archon lists, with all the ramifica-

tions pertaining thereto, has held its own. To the reviewer's desk have recently come three such studies published simultaneously in 1943, French, German, and American, here discussed in that sequence.

The chronology of Delphi, as of Athens, was expressed in antiquity in terms of the annual chief magistracies or archonships, which ran from summer to summer and, being theoretically at least nonrecurrent, served in the absence of a convenient era and numbering system as suitable labels for differentiating the years, provided that a key list was always available for consultation. Such key lists have not survived except in fragmentary form, so that it is now necessary to rely upon more or less plausible restoration; and the fact that the problem of restoration offers an unrivalled cryptographic pastime undoubtedly is responsible for the very considerable number of archon studies which, in the case of Delphi, have been listed by the reviewer in 1931 (*Archons of Athens*, pp. 521-522, cf. pp. 112-145 and index, p. 561), with additions up to 1939 (*Athenian Archon List*, pp. 251-253 [s.v. Daux, Ferguson, Fine, Flacelière, Kahrstedt, Klaffenbach, Kolbe, Robert, Segre], cf. pp. 109-140 and index, p. 271). Works contemporary with or later than this last list have been published by Amandry (*BCH.* 1942/3, pp. 68-83), Bousquet (*BCH.* 1938, pp. 332-369; 1940/1, pp. 76-120; 1942/3, pp. 84-123), Daux (*RP.* 1938, pp. 148-162; *Journal des Savants*, 1939, pp. 117-123; *BCH.* 1939, pp. 142-182; 1942/3, pp. 137-149; *FD.* iii, 3<sup>2</sup>, *Inscriptions depuis le trésor des Athéniens jusqu'aux bases de Gélon*, 1933), Feyel (*Polybe et l'histoire de Béotie au III<sup>e</sup> siècle avant notre ère*, 1942), Klaffenbach (*Gnomon*, 1938, pp. 6-25), Kolbe (*Hermes*, 1940, pp. 54-63, 397-409, as well as the article of 1943 reviewed below), and Valmin (*FD.* iii, 6, *Les Inscriptions du théâtre*, 1939).

Finally, amid the blight of German occupation, Daux has succeeded in publishing at Paris a synthetic analysis of the entire problem of the Delphian archons for nearly one thousand years, from the sixth century B.C. to the fourth century A.D., as a complementary fascicule to the still incomplete epigraphical section (III) of the *Fouilles de Delphes*, analogous to that which Kirchner published in 1918 (somewhat prematurely) to the then incomplete Attic section (II-III) of the *Inscriptiones Graecae* (editio minor). By including references to all published (even if not yet in the *FD.*) or even unpublished Delphian inscriptions



alluding to archonships, Daux has provided a key of inestimable importance for future investigators in a field which is by no means stabilized, as he would be the first to admit.

The work is not, however, a chronology in the usual sense of the word, but rather an archon list arranged in a somewhat difficult tabular form, in columns of which the first includes the reference number and name of the archon, the second the probable date or period, the third the bibliographical citations, together with the names of the *bouleutai* for the two semesters of the year and any necessary chronological argument. The emphasis thus laid on the archon's name rather than on his year of office is an innovation by which Daux felt that he could better express the uncertainties of the problem than by adhering, like his predecessors, to the sequence of years, with the names entered opposite each and with various degrees of uncertainty indicated by marks of interrogation, italics, brackets, etc. Noting that "before the year 200/199 one may almost say that no date is rigorously fixed," Daux breaks his series of four hundred and eighty-one distinguishable archons (though many of the actual names are blank, distinguished only by the *bouleutai*) into fourteen groups lettered A-H and K-P, arranging the names within each group in a more or less arbitrary order.

One group (A) ranges from the beginning of the sixth to the beginning of the fourth century with only seven names, only two of which are fixed, in 590/89 (Gylidas) and 582/1 B.C. (Diodoros). Here, as in many other instances, it is difficult to understand the logic underlying the sequence, inasmuch as the chronological order would better fit the rearrangement A 3, 4, 1, 2, 5, 6, 7.

Five groups (B-F) cover the century 380-280 B.C. with one hundred and four archons, some of whom might be combined; the arrangement is generally chronological, but sometimes alphabetical (e.g., B4-11). These include the important dates of the fourth-century temple accounts, which had been many times studied by Bourguet, most recently in *FD*. iii, 5 (1932); Daux slightly rearranges them, utilizing not only Bousquet's recent article (*BCH*. 1942/3, pp. 84-123) but also the unpublished observations of P. de la Coste-Messelière. The most important changes are the transfer of Thebagoras (in whose year the *promanteia* for the Thourians mentions the destruction of the old temple) from 344/3 to just after 373 B.C., the transfer of Antichares from the end of the

century to about 364-361 B.C. (through the new discovery of a list of contributions to the temple construction), the revival of the old identification of Herakleios with the Herakleides of 357/6 B.C. in Pausanias (x, 2, 3), and the identification of the Damochares hitherto assigned to the following century with the archon of the same name between 337 and 333 B.C. (with the consequent redating of the decree for the poet Aristonoos of Corinth and of his two hymns to Apollo and Hestia).

Three groups (G-H and K) cover the remainder of the third century, 279-198 B.C., the important years of the Aetolian domination, with ninety-two archons, some perhaps earlier and others to be combined. The definite lines of demarcation are the Gallic invasion in 279 B.C., the reviewer's revised date for the Athenian acceptance of the Soteria invitation under Polyuektos in 247 B.C., and the beginning of the second priesthood in 198 B.C. In other words, undeterred by Kolbe's criticisms (see also the following review), Daux retains the current French subdivision of the Soteria festivals into two series, the Amphictyonic and the Aetolian, with the reform occurring about the middle of the century. The exact date, as all French scholars have recently agreed, depends upon the date of the acceptance under Polyuektos and thus upon the Athenian secretary cycles, the most critical point of contact in Athenian-Delphian history of the third century B.C. For convenience, the various dates assigned to Polyuektos since the investigations of De Sanctis and Roussel in 1923-24 (disregarding the earlier arguments in favor of a date between 277/6 and 273/2) are here tabulated:

- 275/4 Lehmann-Haupt (1927), Kolbe (1933-43)
- 261/0 Beloch (1927)
- 257/6 or 255/4 De Sanctis (1923)
- 256/5 Kirchner (1932)
- 255/4 Flacelière (1928-37), Klaffenbach (1931-32),  
Ferguson (1932-34), Tarn (1933), Dow (1934-36),  
Meritt (1935), Kirchner (1935), Lenschau (1936)
- 255/4 or 249/8 Kahrstedt (1937)
- 249/8 Dinsmoor (1931), Pritchett-Meritt (1940),  
Pritchett (1942-43), Meritt (1944)
- 248/7 Dinsmoor (1939), Daux (1943)
- 246 or later Robert (1930-36)
- 243/2 Roussel (1923-32), Segre (1931), Dow (1936),  
Meritt (1938), Ferguson (1938), Robert (1938),  
Bikerman (1938), Klaffenbach (1939), Daux (1939-40), Flacelière (1940), Kirchner (1940)



Daux, who accepted Roussel's date (with the corroborative evidence of Robert and Meritt) even as late as 1940, now tentatively adopts the reviewer's attribution of Polyeuktos to 248/7, not having had access to Meritt's revindication (which, as will be shown in the following reviews, now seems less satisfactory) of the reviewer's earlier proposal of 249/8 B.C. But whether Polyeuktos be assigned to 249/8 or to 248/7 B.C., the result hardly affects Delphian chronology: in either case the first celebration of the Aetolian Soteria could have been, and presumably was, in 248 B.C., which would thus seem to be a more reasonable point of demarcation than 247 B.C.

For the period of the Amphictyonic Soteria, 279-248 B.C., the most important single item of new information is the fact that the Pleiston who belongs to a Pythian year is not the fourth-century archon of that name (D2), as was formerly thought, but the one of the third century (G14), according to information supplied by Coste-Messelière; consequently his date, which the reviewer had formerly (1931) regarded as 266/5 and later (1939), with Flacelière, as 265/4 B.C., is now fixed as 266/5 B.C. This has the effect of locating the nearly solid Hieron-Pleiston group of archons, which the reviewer had formerly confined to thirteen years (278-265) and later, with Flacelière, had spread over fifteen years (279-264), rather within the fourteen years 279-265 B.C., probably, with Daux, transferring Eraspippos (F28) to a year just before 279 B.C., and so locating Thessalos (with a Pythia or Soteria celebration) in 270/69 B.C. Presumably, also, the Damaios-Damosthenes pair should precede rather than, as Daux now thinks, follow Pleiston. In any case, it is now again possible to date Peithagoras in 264/3 B.C. as the reviewer originally believed, instead of, with Flacelière, assigning him to 263/2 or, with Daux, to 262/1 B.C. Now, too, it is possible to return to the reviewer's original scheme of the biennial celebration of the Amphictyonic Soteria, with known festivals in the years of Peithagoras (264/3), Aristagoras (258/7), Emmenidas (256/5), Nikodamos in a Pythian year (254/3), and Kleondas (252/1), thus giving several presumably fixed dates in the first half of the century.

For the period of the Aetolian Soteria the key to the situation lies in the eleven apparently consecutive records, six on a marble opisthographic stele (*SEG.* ii, 260) and five on the so-called Tyrrhenian cippus (*SIG.*<sup>3</sup> 509), which the reviewer in 1931 and 1939 had argued were quad-

rennial, in Olympic years, ranging from 248 to 208 B.C. inclusive. Daux now follows this system, with the possible alternative that they ranged from 244 to 204 B.C., so that double dates are assigned to the few archons named in these records, Praochos (244 or 240), Herys (232 or 228), and Kallias (224 or 220). It seems more reasonable to assume, however, that the marble stele containing six consecutive lists of victors began with the first rather than with the second holding of the reformed Soteria, so that the earlier dates are preferable, these being the key dates in the second half of the century.

Thus, while it would seem that Daux is perhaps unduly pessimistic with regard to fixed dates before 200 B.C., nevertheless it may be admitted that the entire scheme is subject to the readjustment that may be required by any one of the numerous inscriptions still being turned up at Delphi. On the other hand, for a long period after 200 B.C., the case is quite different.

With groups L-M we cover most of the second and first centuries B.C., the period forming the subject of the author's previous book *Delphes au II<sup>e</sup> et au I<sup>er</sup> siècle* (1936). The names (or terms) of one hundred and fifty-two archons (L1-100, M1-52) are given for a slightly greater number of years (198 to ca. 40 B.C.), the previous total being increased by six anonymous terms (L98-100, M25, 34, 51). Within the two main groups the names are arranged according to sub-groups, the priestships II-XIII covering the second century (L) and XIII-XVIII sixty years of the first (M). The sequence of names, in the case of group L, is identical with that of *Delphes au II<sup>e</sup>*, except that L36 and L40 are interchanged, and the possibility of interchanging L63 and L65 is admitted, while "vers 125" is added to L68, "137/6" to L74, the anonymous term L83 to priestship XI, and three anonymous terms L98-L100 at the end. Thus the inconveniences of the former book are repeated, in that only for priestships II-IV and VII-VIII are the names approximately in chronological order; elsewhere they are alphabetically arranged within the sub-groups, so that particularly in priestships IX and XI<sup>1</sup> earlier names disconcertingly follow later ones. In the case of group M, on the contrary, only the first ten names follow the old order, while the rest, with no additions, are rearranged in smaller sub-groups, generally alphabetically but causing no disturbance apart from one curious discrepancy in priestship XIII<sup>2</sup>; and the only change is the addition of "86/5?" to M26.



The basis for the chronology of these two centuries is the relative dating afforded by the priestships, a system of which use could be made during this period because of the immense mass of documentary material existing in the manumission acts, each containing the names of the archon, the *bouleutai*, the two priests of Apollo, and sometimes the Aetolian general. Since the priests were appointed for life, and nature is inconsistent, their terms rarely ended simultaneously; thus one would overlap the successor of the other, and so on, each differing pair forming a separate priestship, though each priest normally spanned two priestships: I, Eukles and Xenon; II, Xenon and Athambos; III, Athambos and Amyntas; etc. The length of each priestship could be determined approximately by the number of archonships dated by each pair of priests. The system was first worked out by A. Mommsen in 1866 for the period 198–169 B.C., and was continued by Pomtow in and after 1889 for the remainder of the period, succeeding investigators gradually reducing the errors and uncertainties. Within each priestship, however, the sequence of the archonships would have remained unknown but for other kinds of evidence. The most important of these additional sources was the chronological list of *prozenoi* (*GDI*. 2581 = *SIG.*<sup>3</sup> 585), first published by Wescher and Foucart in 1863, but first properly evaluated by Mommsen three years later.

In addition, there are six synchronisms with Athenian archons, of which the first (Praxias L21 = Philon at Athens), in a Pythian year, had been fixed with almost complete certainty in 178/7 B.C. on Delphian evidence alone (the only alternative 174/3 being far less satisfactory); both this and four of the others (Timokritos L61 = Timarchos, 138/7; Pyrrhos L73 = Dionysios after Lykiskos, 128/7; Xenokrates L87 = Agathokles, 106/5; Mentor M4 = Argeios, 98/7) are now definitely fixed by the evidence of the Athenian secretary cycles, most of the evidence having been recognized long ago by Ferguson. The sixth instance (Aristion L65 = Demostratos) has generally been assigned to 130/29 B.C. on Athenian evidence, though this, not being as conclusive as in the other instances, is regarded by Daux as less satisfactory than 134/3 B.C., and in his writings of 1936–40 he insisted even more strongly that 134/3 B.C. was correct. Here, however, the Athenian evidence seems to outweigh the Delphian, not only according to the arguments of Pritchett and the reviewer, to which Daux refers,

but also in the convincing Pritchett-Meritt tabular demonstration (to which he did not have access). Thus Hagion (L63) and Aristion (L65), both in Pythian years, should be interchanged, occupying 134/3 and 130/29 B.C., respectively.

The known archonships of the time of the Empire, contained in groups N–P and broken down according to the priestships XIX–XXXVI, are one hundred and twenty-six in number, covering approximately three centuries and a half. Priestships XIX–XXXIII, extending from just after 40 B.C. nearly to 80 A.D., overlap in fairly satisfactory manner with very few uncertainties as to relative sequence, though their exact lengths are often problematical. The priestships XXXIV–XXXVI, however, are merely isolated instances among the many that must have filled the remaining time down to the last known archon of about 315 A.D. There are six synchronisms with Athenian archons, who are not in themselves always accurately located; and the convenient list of Athenian archons of the imperial period published by Oliver (*Hesperia* 1942, pp. 81–89) was of course inaccessible to Daux. Five of them come early in the period (Antigenes N14 = Architimos at Athens, a Pythian year, 30/29?; Antigenes again N29 = Apolexis, ca. 20/19, with the possibility noted by Oliver that it was 25/4; Timoleon N26 = Theophilos, 12/1 or 11/0; Xenagoras N29 = another Apolexis, ca. 9–1 B.C.; Kleon N25 = Nikostratos, ca. 1–9 A.D.), while the sixth (.... as P5 = anarchy at Athens in the year after K. Trebellios Rouphos of Toulouse, ca. 86–92 A.D.).

A phenomenon of the imperial period, which recurs also at Athens, was the comparative scarcity of qualified candidates for the archonship, so that several were elected for the second time (generally with τὸ δεύτερον, as N20, N32, N35, N39, N41, O19, O30, O32, O40, O43, P1, P21, P32—the last hastily elected to fill an unexpired term—and also, with the number omitted, N44, O15, O20, O24, O27, P25) or even for the third time (generally with τὸ τρίτον, as O2, O4, O25, O35, P3, P6, and also, with the number omitted, O26, O36). Not only, as was natural, did several archons subsequently become priests (L38, L41, L42, L44, L63, L76, L78, M1, M5, M14, M36, N15, N23, N28, O18–19–25, O29–30, O31–32, O37, O39–P1, P26), but also the priests were now often drafted to fill the archonships (M49, N8–44, N9, N32–02, N39–04, N40–41, O33, O40, P6). Sometimes, as at Athens, the archonships were held by absentee emperors (Titus P2, Hadrian



P16-21, and Antoninus Pius P24). And at least once there was no archon at all, merely a year of anarchy (P13).

The work is concluded with several valuable indices of proper names, those of the archons, *bouleutai*, *neokoroi*, and municipal secretaries (pp. 97-118, for the secretaries see also pp. 80-81), of their patronymics (pp. 121-131), and of the priests of Apollo (pp. 119-120). Comparison of these reveals interesting information as to the careers of the various individuals, as for instance the material on the relation of priesthood to archonship embodied in the foregoing paragraph. It might have been well if a convenient table of the sequences of the priestships had been included, with their approximate limits, which must now be somewhat painfully extracted from the commentary (note that Prétrise xxvi on p. 77 should be "ap." rather than "av. J.-C."). Such a table might also have included the priestships not attested epigraphically, or at least not in connection with the archons, inserting, for instance, xxxiv bis, Gaios Memmios Euthydamos and Mestrios Ploutarchos (Plutarch, *Quaest. conviv.* vii, 2, 2 and *SIG.*<sup>3</sup> 829A).

COLUMBIA UNIVERSITY WILLIAM B. DINSMOOR

DIE AETOLISCHEN SOTERIEN UND DIE ATTISCHE ARCHONTENFORSCHUNG, by Walther Kolbe. Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse, 1942/43, 1. Pp. 75. Carl Winter, Heidelberg, 1943. 3.80 RM.

In this wartime study we have Kolbe's final restatement—he died before it was published—of his position with regard to the succession of the Athenian archons, at the moment of the contact with Delphi in the year of Polyuktos, a position already developed in several of his earlier studies of the preceding decade (*Gott. Nach.* 1933, pp. 481-512; *DLZ.* 1933, 2220-2226; *ibid.* 1936, 2170-2173; *Hermes.* 1933, pp. 440-456; *ibid.* 1934, pp. 217-222; *ibid.* 1940, pp. 54-63, 397-409), but now restated without benefit of the latest American research in the same field. No American investigations are cited later than Meritt's Agora excavation report of 1938 (*Hesperia* 1938, pp. 77-160); for the reviewer's book of 1939 (*The Athenian Archon List*), that published by Pritchett and Meritt in 1940 (*The Chronology of Hellenistic Athens*), the various contributions in the 1940 volume of *Athenian Studies presented to . . . Ferguson* (*Harvard Studies*, Supplement

I, pp. 37-69, 471-507), as well as Pritchett's dissertation of 1943 (*The Five Attic Tribes after Kleisthenes*, see the following review), and the numerous reports in the volumes of *Hesperia* since 1938, were all unknown to Kolbe because of war conditions. More surprising is the absence of reference to any of the French studies (cited in the preceding review) published later than 1937. The result is a somewhat antiquated argument, marred by fulsome but sometimes misguided devotion to the Muse called Klio.

The investigation is divided into five sections, with introduction, conclusion, and appendices.

In the first section (pp. 6-18) an attempt is made, by comparison with other decrees which pertain either to the foundation of new festivals (as at Pergamon) or to the revision of old festivals (as at Sardis), to prove that the Athenian acceptance of the invitation to participate in the Soteria festival at Delphi (*IG.*<sup>2</sup> ii, 680), in the archonship of Polyuktos, is in language more appropriate to a new than to a reformed festival. This is the weakest portion of the entire argument, depending so much upon syntactical restoration of fragmentary inscriptions as to be hardly convincing, and the conclusions, often presented in Kolbe's earlier studies, have been several times refuted.

In the second section (pp. 19-28) it is argued that five surviving acceptances of the Soteria invitation (by Athens, Chios, Tenos, another of the Cyclades, and Smyrna, to which we now add Abdera, *BCH.* 1940/41, pp. 100-107) are not all of the same date, the Athenian being concerned with a new festival, the others with an existing festival. In consequence, it being a question of the same festival in all, the Athenian acceptance must be older than the others. Hence the fact that one of these others, that of Smyrna, mentions King Seleukos II (247/6-225 B.C.), does not prove that the Athenian acceptance must be as late as 247/6 B.C. This is an argument which would do no more than corroborate the conclusions already reached by the reviewer in 1931 and by Meritt in 1940.

The third section (pp. 28-32) is devoted to the evidence of the new ephebe decree, Agora i, 4323 (*Hesperia*, 1938, p. 121, no. 24), which unexpectedly showed that Thersilochos was the archon immediately preceding Polyuktos. As Kolbe notes in part, the date 243/2 B.C. originally proposed for Polyuktos by Roussel (1924) and retained by Ferguson (1932) as a doubtful alternative, having received further support from Robert



(1930-36), Segre (1931), and Dow (1936), seemed by the new discovery so well established that "one may now reckon with Polyeuktos in 243/2 as a fixed date" (Meritt, *loc. cit.*), a conclusion acclaimed also by Ferguson, Robert, and Bikerman (1938), Daux and Klaffenbach (1939), Flacelière and Kirchner (1940). Ignoring the reviewer's previous objections (1931) to this date, and unaware of the discovery (announced in the *Agora Weekly Report* early in 1938, even before the publication of the Thersilochos-Polyeuktos inscription) of the Philoneos-Kydenor inscription which utterly demolished the 243/2 B.C. date, and without access to the detailed discussion by the reviewer in 1939 and by Pritchett and Meritt in 1940, Kolbe elaborates two other vital objections to the 243/2 B.C. date, the fact that the Salaminian stele could not have accommodated six archonships between Diomedon and Theophemos, and the conclusion that the Soteria were held quadrennially in Olympic years and that there were not enough such years between 243/2 B.C. and the end of the century to contain all the known Soteria festivals—these being the very arguments which the reviewer had marshalled in 1931.

The fourth section (pp. 32-40) is primarily a diatribe against the shackles of the "Ferguson Law" of the secretary cycles. Confessing that when he wrote his first archon studies of 1903-08 he had been "under the curse of the law of the secretaries," Kolbe now asserts that "in archon research we can distinguish between truth and error only if we take a station outside the tribal cycles." We are reminded of his earlier maxim that "History cannot be pressed into the Procrustean bed of a System" (*DLZ*, 1933, 2222). He chooses as an example of "historical method" the inscriptions of Magnesia-on-the-Maender which apparently place the annual stephanephore Moiragoras "four[teen]th" after Zenodotos, as contrasted with the tribal cycles of the Athenian secretaries which would date these two officials in 221/0 (V) and 209/8 (IV) B.C. or twelve years apart. Concluding that the secretary from the divided deme Paiania in 221/0 B.C. was from Antigonis (I)—as the reviewer had wrongly assumed in 1931—rather than from Pandionis (V), and that the secretary from Aigeis (IV) should be assigned to 208/7 B.C. in accordance with "historical method," Kolbe points out that with either I or V in 221/0 and with IV in 208/7 B.C. no cyclical connection between the two dates (there

being then thirteen tribes) is possible. He is, of course, unaware of the result of the reviewer's examination of the Magnesians inscription in 1939 (*Archon List*, pp. 165-167), indicating that the so-called "historical method" is at fault in that Moiragoras was not the "four[teen]th" stephanephore but the "fourth [celebrating]" the quadrennial Leukophryena, that is, in the twelfth year after Zenodotos in 221/0 B.C., exactly fitting the tribal cycles. It is on the basis of this (erroneous) demonstration of the fallacies of "System" that Kolbe now concludes that "all dates and tribal affiliations obtained by means of the Ferguson system have broken down."

The fifth section (pp. 40-66), therefore, constitutes an effort to place Polyeuktos in his proper position on "historical grounds" without reference to the secretary cycles. Assuming that the only appropriate date for Polyeuktos, on the hypothesis that the Soteria invitation accepted in his year must apply to a new festival founded immediately after the Gallic invasion of 279 B.C., would be in the seventies, and that all recent attempts to locate him in the forties or fifties must be discarded, Kolbe is impelled to reshuffle the archons for the thirty-five years between the fall of Lachares and the end of the Chremonidean War in order to find room not only for Polyeuktos but also, necessarily, for his known immediate predecessors and successors. Ferguson had claimed (*AJP*, 1934, p. 320) that, even if one disregarded the obligations of the secretary cycles, Polyeuktos and his associates would be excluded from this period by the sheer weight of the number of other known archons. Kolbe refutes this claim, and triumphantly produces a table (p. 75) which not only accommodates Polyeuktos and his known associates but even has one place to spare. This table (except for the years 307-296 about which there is no disagreement) is reproduced on following page (p. 612) and compared with the two systems antedating but not utilized in his publication.

It will be noted that, while the Pritchett-Meritt system of secretary cycles exactly reproduces that which the reviewer had proposed in 1931 (i.e. system A of 1939), with a single two-year interruption, and while the reviewer's final preference in 1939 (system B) had been, and still is, for a single three-year interruption, Kolbe now suggests ten to twelve breaks (10-11, 11, 8, 2, 2, 2, 9, 4-10, 1-4, 6-12, 1-3, 11-12, 4-6) within the same period of thirty-five years. As Ferguson observed (*AJP*, 1934, p. 331, n. 40) of an earlier



| <i>Dinsmoor 1939</i> |                         |      | <i>Pritchett-Meritt 1940</i> |      |                         | <i>Kolbe 1943</i> |        |  |
|----------------------|-------------------------|------|------------------------------|------|-------------------------|-------------------|--------|--|
| 296/5                | *Nikias . . . . .       | X    | *Nikias . . . . .            | X    | *Nikias . . . . .       | X                 | 296/5  |  |
| 295/4                | *Nikostratos . . . . .  | XI   | *Nikostratos . . . . .       | XI   | *Nikostratos . . . . .  | XI                | 295/4  |  |
| 294/3                | *Olympiodoros . . . . . | 12   | *Olympiodoros . . . . .      | A    | *Olympiodoros . . . . . | XI                | 294/3  |  |
| 293/2                | Olympiodoros . . . . .  | A    | Olympiodoros . . . . .       | A    | Philippos . . . . .     | VIII              | 293/2  |  |
| 292/1                | Philippos . . . . .     | A    | Philippos . . . . .          | 12   | Kimón . . . . .         | ?                 | 292/1  |  |
| 291/0                | Kimón ? . . . . .       | A    | Aristonymos . . . . .        | I    | — . . . . .             | ?                 | 291/0  |  |
| 290/89               | Aristonymos . . . . .   | I    | Charinos . . . . .           | II   | Charinos . . . . .      | II                | 290/89 |  |
| 289/8                | Charinos ? . . . . .    | II   | Telokles . . . . .           | 3    | Telokles . . . . .      | ?                 | 289/8  |  |
| 288/7                | Xenophon . . . . .      | 3    | Diokles . . . . .            | IV   | Ourias . . . . .        | IX                | 288/7  |  |
| 287/6                | Diokles . . . . .       | IV   | Diotimos . . . . .           | V    | Diokles . . . . .       | IV                | 287/6  |  |
| 286/5                | Diotimos . . . . .      | V    | Isaios . . . . .             | 6    | Diotimos . . . . .      | V                 | 286/5  |  |
| 285/4                | Isaios . . . . .        | 6    | Euthios . . . . .            | VII  | Isaios . . . . .        | 6                 | 285/4  |  |
| 284/3                | Euthios . . . . .       | VII  | Nikias . . . . .             | VIII | Euthios . . . . .       | VII               | 284/3  |  |
| 283/2                | Nikias . . . . .        | VIII | Ourias . . . . .             | IX   | Nikias . . . . .        | VIII              | 283/2  |  |
| 282/1                | Ourias . . . . .        | IX   | Kimón . . . . .              | X    | Xenophon . . . . .      | 9                 | 282/1  |  |
| 281/0                | *Gorgias . . . . .      | X    | *Gorgias . . . . .           | 11   | *Gorgias . . . . .      | X                 | 281/0  |  |
| 280/79               | Sosistratos ? . . . . . | 11   | Sosistratos . . . . .        | 12   | Aristonymos . . . . .   | I                 | 280/79 |  |
| 279/8                | *Anaxikrates . . . . .  | XII  | *Anaxikrates . . . . .       | I    | *Anaxikrates . . . . .  | 2                 | 279/8  |  |
| 278/7                | *Demokles . . . . .     | I    | *Demokles . . . . .          | 2    | *Demokles . . . . .     | 3                 | 278/7  |  |
| 277/6                | Euboulos ? . . . . .    | 2    | Olbios . . . . .             | III  | Kallimedes . . . . .    | IV                | 277/6  |  |
| 276/5                | Olbios . . . . .        | III  | Xenophon . . . . .           | 4    | Thersilochos . . . . .  | VI                | 276/5  |  |
| 275/4                | Philippides ? . . . . . | 4    | Glaukippos . . . . .         | V    | Polyeuktos . . . . .    | VII               | 275/4  |  |
| 274/3                | Glaukippos . . . . .    | V    | Kleomachos . . . . .         | VI   | Hieron . . . . .        | VIII              | 274/3  |  |
| 273/2                | — . . . . .             | VI   | — . . . . .                  | 7    | Diomedon . . . . .      | 9                 | 273/2  |  |
| 272/1                | Telokles ? . . . . .    | 7    | Euboulos . . . . .           | 8    | Euboulos . . . . .      | 10                | 272/1  |  |
| 271/0                | *Pytharatos . . . . .   | 8    | *Pytharatos . . . . .        | 9    | *Pytharatos . . . . .   | 11                | 271/0  |  |
| 270/69               | Peithidemos . . . . .   | IX   | Diogeiton . . . . .          | X    | Theophemos . . . . .    | 12                | 270/69 |  |
| 269/8                | Diogeiton . . . . .     | X    | Menekles . . . . .           | XI   | Kydenor . . . . .       | 1                 | 269/8  |  |
| 268/7                | Menekles . . . . .      | XI   | Nikias . . . . .             | XII  | Philokrates . . . . .   | II                | 268/7  |  |
| 267/6                | Nikias . . . . .        | XII  | Peithidemos . . . . .        | 1    | Peithidemos . . . . .   | 3                 | 267/6  |  |
| 266/5                | — . . . . .             | 1    | Philokrates . . . . .        | II   | Menekles . . . . .      | XI                | 266/5  |  |
| 265/4                | Philokrates . . . . .   | II   | Philippides . . . . .        | 3    | Nikias . . . . .        | XII               | 265/4  |  |
| 264/3                | *Diognetos . . . . .    | 3    | *Diognetos . . . . .         | 4    | *Diognetos . . . . .    | 4                 | 264/3  |  |
| 263/2                | Antipatros . . . . .    | 4    | Antipatros . . . . .         | 5    | Glaukippos . . . . .    | V                 | 263/2  |  |
| 262/1                | *Arrheneides . . . . .  | 5    | *Arrheneides . . . . .       | VI   | Antipatros & . . . . .  | 6                 | 262/1  |  |
|                      |                         |      |                              |      | * Arrheneides           |                   |        |  |

and somewhat less drastic arrangement by Kolbe, if we are to interpret the surviving evidence in this manner, we must admit, on the part of Fate, "a conspiracy to mislead." It will be our present concern, however, not to discuss this disintegration of the secretary cycles, but to test Kolbe's arrangement on the basis of his own arguments. The fact that only nine of the thirty-five years (those marked with asterisks) agree as to the archon names—the first three known to be consecutive because of the list in Dionysios of Halikarnassos, Gorgias counted by dead reckoning ten years back from Pytharatos (all seeming now agreed in this instance not to use inclusive counting), and the five others fixed on historical evidence—and that seven of these nine, or thirty-

three of the thirty-five, show differences of one sort or another, will not affect this review. It is here merely a question of numbers.

The decade of the seventies, into which Kolbe wishes to insert Polyeuktos, is enframed by fixed dates at both ends, Anaxikrates and Demokles (279/8 and 278/7) and Pytharatos (271/0), with six intervening years (277–271). Of the archons whom Meritt or the reviewer had placed in these six years, Kleomachos or Telokles, Philippides or Xenophon, as well as Euboulos, Glaukippos, Olbios, and one unknown, Kolbe eliminates all except Euboulos, necessarily in this decade because he shortly antedated the death of Epicurus (271/0). Telokles (pp. 45–50) and Xenophon are placed in the preceding decade, Glaukippos (pp.



57-58) in the following decade, while Kleomachos (pp. 71-73), Olbios (pp. 53-54) and Philippides (pp. 55-56) are thrust down to the period after 262/1 B.C. By thus clearing five of the six years in the gap, Kolbe obtains room for the fixed sequence of four archons Thersilochos, Polyeyktos, Hieron, and Diomedon, together with their more or less immediate predecessor Kallimedes.

The decade of the eighties is bounded by the fixed dates of Olympiodoros (294/3 and Anaxikrates (279/8), with fourteen intervening years (293-279). Of these, seven are occupied by names each located historically within one year of accuracy, namely, Philippos (in 293/2 or 292/1), the Diokles-Nikias sequence of five (288/7-284/3 or 287/6-283/2), and Gorgias (281/0 or 280/79). Thus there are only seven years disposable for other archons, of whom Kolbe, like Meritt and the reviewer, agrees that, whatever their exact order, we must include Aristonymos, Charinos, Ourias, and Telokles, all earlier than the death of Epicurus (271/0), also Kimon and Xenophon who must antedate the end of the Chremonidean War (after which Phaidros of Sphetos was more than seventy years old and would hardly have been elected general, *IG*.<sup>2</sup> ii, 682) but can find no places in the seventies or sixties. After eliminating the other names which Meritt and the reviewer had assigned to this period, Olympiodoros (second year, pp. 43-45) and Sosistratos (pp. 52-53), Kolbe still has one free year (291/0) which he leaves blank.

In the decade of the sixties is a group of six years enframed between the fixed dates of Pytharatos (271/0 and Diognetos (264/3). Of the archons whom Meritt or the reviewer had located in these years, while accepting Menekles, Nikias, Peithidemos, and Philokrates, Kolbe abolishes Diogeiton (pp. 50-51) and Philippides (pp. 55-56), transferring them to the middle of the century. In the two years thus gained, Kolbe inserts the next two names in the Salaminian stele, Theophemos and Kydenor, thus completely filling the interval. After Diognetos, furthermore, by compressing Antipatros down into the year of Arrheneides (262/1), Kolbe gains one year which he utilizes for the insertion of Glaukippos, squeezed out of the preceding decade.

Thus, of the thirty-five years in question, nine are definitely unchangeable and twenty-five are occupied by Kolbe's candidates, leaving only one vacancy. Yet there are at least three more archons who must be inserted in this period, forming an

excess of two. For the second year of Olympiodoros cannot be disregarded, being required both to fill out the seventy-year list in Dionysios of Halikarnassos and to fit the qualification "second" in one of his decrees (*IG*.<sup>2</sup> ii, 389); Kolbe's adverse arguments hardly differ from those of 1933, which the reviewer has considered elsewhere (*Archon List*, pp. 30-32). Also, even if Sosistratos himself should be eliminated from 280/79 B.C., there must in any case have been an archon with 11 letters in his name, and a secretary with 21 letters in name, patronymic, and demotic together (*IG*.<sup>2</sup> ii, 672, and now also an additional copy with the names again missing but requiring the same numbers of letters, *Hesperia*, 1941, pp. 338-339). This archon could not have been Anaxikrates or Aristonymos, the only other known names of sufficient length in this period, since Aristonymos required 26 letters for the secretary of Aithalidai, I (*IG*.<sup>2</sup> ii, 671), and Anaxikrates or some other name in 12 letters must be associated with a secretary from Eitea, I or XII (*IG*.<sup>2</sup> ii, 670B), with a minimum requirement of 23 letters. Whatever combination be adopted, we have decrees of three different years (*IG*.<sup>2</sup> ii, 670B, 671, 672, and its replica) requiring three long archon names, Anaxikrates, Aristonymos, and . . . . . ; whether the third were Sosistratos or not hardly matters, the main fact being that we now have two names, Olympiodoros (second year) and . . . . . , to be inserted in Kolbe's list before 279 B.C., where only one gap exists. Thus we are forced to thrust one name (Xenophon?) down into the seventies. Likewise the discovery announced in 1938, and incorporated in the reviewer's list of 1939 and in that of Pritchett and Meritt in 1940, proving that Philoneos was the immediate predecessor of Kydenor and so must be inserted between the latter and Theophemos, is fatal to Kolbe's solid group in the sixties. Taking into account this new discovery, Theophemos would be thrust back into the seventies. But the solid block inserted by Kolbe into the seventies would not permit the inclusion of two additional archons, whether Xenophon and Theophemos or any others. Presumably, moreover, there were others: the Philippides eliminated by Kolbe, because the last to see an inscription with this name was Ludwig Ross, in the days before exact criticism, has now been discovered by Dow (*Hesperia*, 1943, p. 161) on another stone of this very period; and wherever Thersilochos and Hieron are placed, there, too, we must locate Lysitheides. Hence



Kolbe's entire arrangement becomes an impossibility.

Perhaps, however, this detailed examination of the evidence from Kolbe's own standpoint has been fruitless. If it had not been for the breakdown of communications during the war, he could hardly have presented it exactly in this form. It must be emphasized, however, that even if Kolbe had been able to evaluate the new evidence, the chief objection would still have been to his fundamental thesis, the abandonment of the secretary cycles except for years in which the tribal affiliations actually appear upon the marbles. This thesis is being undermined with the discovery of inscription after inscription with the tribal affiliations exactly as they had been previously restored by means of the "Ferguson Law"—between 1931 and 1939 alone there were seventeen such instances (*Archon List*, pp. 8-9). The fact that "the total amount of error discovered in the proposed tribal affiliations of the secretaries is less than 2 per cent" would in itself make it needless to take Kolbe's results too seriously.

COLUMBIA UNIVERSITY WILLIAM B. DINSMOOR

THE FIVE ATTIC TRIBES AFTER KLEISTHENES, by W. Kendrick Pritchett. Dissertation, The Johns Hopkins University. Pp. 39. Baltimore, 1943.

The necessary prerequisite for a successful solution of the baffling problem of the Athenian archon list in the Hellenistic period is a definitive list of the tribal affiliations of the various demes, as reassigned to the new tribes created during this period. The groundwork had been assembled in another American dissertation of similar title, *The Five Post-Kleisthenean Tribes*, by F. O. Bates (Cornell University, 1898). The reviewer had revised all previous lists in the light of information available up to the beginning of the Agora excavations in 1931 (*Archons of Athens*, pp. 444-451). All that has become known because of the Agora excavations of 1931-40 is now incorporated in Pritchett's new analysis, published after his departure for the Pacific with the 45th Fighter Squadron.

The work is divided into four chapters (of which the two first were originally published in *AJP*, 1940, pp. 186-193, and 1942, pp. 413-432), dealing with the four occasions on which new tribes were created, and with the composition of those tribes, (1) the "Macedonian" tribes Antigonis and Demetrias, (2) the "Egyptian" tribe Ptolemais, (3)

the "Pergamene" tribe Attalis, and (4) the "Roman" tribe Hadrianis. The dates of creation were (1) 307/6, (2) 224/3 (according to Pritchett), (3) 201/0 B.C., and (4) 124/5 A.D. Their positions in the official order of the tribes were: (1) I and II until their dissolution in 201 B.C., (2) VII in the first period of thirteen tribes and V thereafter, (3) XII in the second period of twelve tribes and XIII thereafter, and (4) VII in the second period of thirteen tribes. So far the only disputable points with regard to the definition of these tribes are in connection with their dates of foundation.

(1) The "Macedonian" tribes have always been known to have begun to function at some time in 307/6 B.C., but it was formerly thought to have been at the beginning or end of the first prytany, until the reviewer in 1931 argued that it was not until the end of the sixth prytany, on Gamelion II 8 or about Feb. 13, 306 B.C. (*Archons of Athens*, pp. 151-152, 378-385), a position seemingly corroborated by Pritchett's discovery (*AJP*, 1937, pp. 220-222; Leonardos had previously noted but had not utilized the fact, *Δελτ.* 1916, πρρ. 67-69) that they were not yet functioning in the fifth prytany. This is the state in which the matter is left in the first chapter of the present study, reprinting Pritchett's article of 1940. Since then, however, several revisions have been suggested. An inscription of the eleventh day of the year (accidentally discovered by the reviewer on July 5, 1939, on the roof of the "Theseum") demonstrated that the secretary who acted throughout the remainder of the year was already in office and so had presumably been elected at the usual time (a month before the end of the preceding year); and, in the light of new investigations by Broneer, Meritt, Pritchett, and West, the reviewer revised his estimates, concluding that the mention of the "fifth" prytany in the inscription analyzed by Pritchett was a clerical mistake for "fourth" (it being the fifth month) and that the new tribes began to function on Maimakterion 26 or about Dec. 4, 307 B.C. (*Archon List*, pp. 212-222). On the other hand, Meritt (with Pritchett) returned to the old theory that the new tribes began to function at the beginning of the year, or rather, since they were obviously not yet functioning in the inscription dated in Maimakterion (referring to the senate of five hundred), that allowance was made for them at the beginning of the year, which was thus divided into twelfths rather than tenths from the



very first, even though the new tribes and the senate of six hundred were not actually in existence until the end of the sixth prytany, Gamelion I, 3, or about Jan. 9, 306 B.C. All this discussion of the exact day within a known year may seem trivial; but, as a matter of fact, it is of great importance in one respect, namely, whether the new tribes were created or foreseen before or not until long after election day (just before the summer of 307 B.C., that is, a month or more before the beginning of the Attic year 307/6). For a decision on this point could, and probably would, affect the entire rotation of the officials, and so the dates of the archons, for the next eighty years. This is a point which the work now being reviewed does not attempt to decide, and does not, in fact, even mention; but it is the essential point of difference between the two books by the reviewer (*Archon List*, 1939) and Pritchett-Meritt (*Chronology*, 1940). Pritchett and Meritt have, to be sure, skillfully restored all the inscriptions of this peculiar year in such a way as to fit their scheme; but this is not in itself probative, since all recent investigators have succeeded in restoring all these inscriptions in many different ways. Meritt, who at first had regarded the year as ordinary, now agrees with the reviewer that it was intercalary; but, whereas he and Pritchett adopt the equation  $(6 \times 29\frac{5}{6}) + (6 \times 34\frac{1}{6}) = 384$  days, the reviewer, reversing the long and short prytanies, formerly proposed  $(6 \times 35\frac{2}{3}) + (6 \times 28\frac{1}{3}) = 384$  days and, subsequently,  $(5 \times 35\frac{2}{3}) + (7 \times 29\frac{2}{3}) = 384$  days. This is not the place for a discussion of the individual restorations. All must agree that, whatever happened, it was a most peculiar year: something unexpected occurred at its middle, when in the wrong place for a thirteenth month the second Gamelion was inserted; and this, which in itself may be paralleled in other instances, is further complicated by the fact that the extra month (or months, if we conclude that Mounichion was omitted in order that there might also be a second Anthesterion) must be analyzed in the light of the peculiar word  $\eta\mu\epsilon\rho\omicron\lambda\epsilon\gamma\delta\acute{o}\nu$  which does not appear elsewhere. In the Pritchett-Meritt scheme there is no logical explanation of this disturbance, which, it would seem natural to suppose, would have been caused by the unexpected functioning of the two new tribes and the enlarged senate. That the new tribal arrangement was not planned in advance of the beginning of the year, furthermore, seems evident from the story of the liberation of Athens by Demetrios Poliorketes; all our

literary authorities prove that it was well along in the year 307/6 B.C. before he actually came up to Athens (Dinsmoor, *Hesperia*, 1935, pp. 304-305). The decree of Stratokles adulating Demetrios, proposing the two gold statues of Antigonos and Demetrios as eponymous heroes which accompanied the creation of the two new tribes, dated from after the time of the actual arrival of Demetrios in Athens, since it included the erection of an altar of Demetrios "Kataibates" on the spot where the liberator descended from his chariot. Finally, at the time of the election of the secretary of the senate in 307 B.C. the rotation of the secretary cycles was not yet instituted (the secretary Lysias of Diomeia belonging to Aigeis, II, at the time of his election and only later in the year transferred to Demetrias, II—Aigeis then becoming IV—together with the proposer of the adulatory decree, Stratokles of Diomeia) and did not begin until the following year 306/5 B.C., as is shown by the break between tribes II and XI, the latter actually beginning the rotation. It seems most improbable, therefore, that the rotation of the priestly cycles of Asclepius, on which the Pritchett-Meritt system is largely based, should have been instituted at the beginning of 307/6 B.C., particularly in view of the fact that the first place would then have been occupied by Antigonis (I) which had not yet been created. All the evidence suggests that the date of the creation of the two "Macedonian" tribes was late in the year 307/6 B.C., and that the rotation of the secretary and priestly cycles did not begin until the summer of 306 B.C., best fitting the chronology of the archons as proposed in 1939 by the reviewer (*Archon List*).

(2) With regard to the creation of Ptolemais the historical evidence is not so specific, so that modern investigators have advocated various dates between the end of the Chremonidean War in 263 and the death of Ptolemy III Euergetes in 221 B.C., or, more recently, between 229, the liberation of Athens, and 221 B.C. Ferguson and the reviewer had narrowed the limits to the years between 226/5 and 222/1 B.C., inclusive, of which Ferguson had preferred 224/3 or 223/2, the reviewer 226/5, and Pritchett, in the study under consideration, 224/3 B.C. It would seem that no convincing decision can be based on the evidence as yet available; both 226/5 and 224/3 B.C. have arguments in their favor. Analysis of the great archon list IG.<sup>2</sup> ii, 1706, of which the tabulation by Ferguson (*Tribal Cycles*, p. 50) was simul-



taneously revised both by the reviewer (*AJP*, 1940, p. 467) and by Pritchett and Meritt (*Chronology*, p. 44), reappears in Pritchett's final tabulation in the present study (p. 15); but the only essential differences remaining are those of interpretation, whether the fourth thesmothetes of the year of Ergochares (226/5) was of Kekropis when elected and was later transferred to Ptolemais—a matter which would not disturb the order of the list in either case—and, more important, whether the fifth thesmothetes of the year of Niketes (225/4) was of Kekropis or of Ptolemais (the latter disturbing the official order, just as in the following year of Antiphilos the third thesmothetes unavoidably disturbs the official order). Pritchett believes that the fifth thesmothetes of Niketes was of Kekropis, the order being undisturbed; the reviewer has suggested the reverse. The reviewer believed that the disturbance in 225/4 B.C. could be explained by another disturbance in the preceding year; but Pritchett publishes a new inscription of 226/5 B.C. (p. 22) which could be so restored as to indicate that, while the calendar of 226/5 B.C. was undeniably peculiar, it would not be incompatible with the existence of only twelve tribes. But the ambiguity still remains, because the new inscription is actually so fragmentary that it could also be restored in a manner fitting the existence of thirteen tribes. We are in a period of transition from the twelve tribes (with prytanies averaging  $29\frac{1}{2}$  days in ordinary years and 32 days in intercalary years) to the thirteen (with prytanies averaging  $27\frac{2}{3}$  days in ordinary and  $29\frac{1}{3}$  days in intercalary years). Restoring the calendar equation as [Antheaterion] 8=Pryt. [VIII 2]2, Pritchett assumes twelve prytanies with  $(2 \times 31) + (4 \times 32) + (2 \times 33) + (4 \times 32) = 384$  days. But we could equally well restore [Pyanopsion] 8=Pryt. [V] 2, as indeed Pritchett suggests in a footnote, thus obtaining thirteen prytanies with  $(2 \times 30) + (2 \times 32) + (8 \times 29) + 28 = 384$  days, the year starting out as an ordinary one with twelve tribes, suddenly lengthened to an intercalary year in the third month to accommodate the additional tribe, but with the third and fourth prytanies operating on the 32-day intercalary basis because of delays in the composition of Ptolemais. The matter is one that can only be decided by the discovery of new inscriptions.

(3 and 4) The dates of the creation of Attalis and Hadrianis are fixed, the former in 200 B.C. by Polybius and Livy, the latter in 124/5 A.D. by the

researches of Graindor, and so have been accepted without further investigation.

A most valuable part of the study is the closer definition of the composition of the new tribes. The reviewer had listed thirteen demes in Antigonis, of which Pritchett omits two (Ankyle B and Phegaia B, the latter eliminated by Dow), and regards one (Deiradiotai) as uncertain, but adds one (Kytheros), thus having a total of eleven or twelve. In Demetrias the reviewer had included eleven demes, which Pritchett retains (reinstating Anakaia B and Atene B, eliminated by Dow) with the possible exception of one uncertainty (Amphitrope B), and to these adds five, Daidalidai, Oion, Kerameikon, Phyle B, Poros, and Potamos B, giving a total of fifteen or sixteen. Most of these additions result from new inscriptions found in the Agora excavations. On the other hand, the composition of Ptolemais (twenty-four demes), Attalis (thirteen demes), and Hadrianis (thirteen demes) present no changes when compared with earlier lists.

It would have been desirable to have eliminated the discrepancies arising from reprinting articles which had previously appeared in a periodical. Thus part of a footnote in Chapter I (p. 12, n. 23) is retracted in Chapter II (p. 17, n. 15); and some of the most important evidence for the subdivision of Atene, which should have appeared in Chapter I, was added two years later in Chapter II (p. 14, n. 5). But these are minor criticisms of a work which will long be of importance for the study of the tribal relations and so of the politics and history of Athens.

COLUMBIA UNIVERSITY WILLIAM B. DINSMOOR

TARENTE, DES ORIGINES À LA CONQUÊTE ROMAINE, by *Pierre Willeumier*. E. de Boccard, Paris, 1939. 752 pp., 48 pls., 2 maps.

This excellent book on Tarentum is really a general history of Greece applied specifically to one region. Tarentum lends itself particularly well to such an exposition. Her dominant situation on the Tarentine gulf gave her economic prosperity; she became a leading center of Greek art and thought in South Italy; and inevitably she played a prominent part in the many wars engendered by the hatred of the ousted barbarians, the jealousy of the neighboring Greek cities, and later by the rivalry of Rome. M. Willeumier begins his story with what is known of the pre-Laconian population, discusses the different versions of the Spartan colonization, gives eloquent accounts of Archytas,



"the first and best example of a philosopher in power," of Alexander the Molossian and of Hannibal, and traces the dramatic rise and triumph of Rome. During the fourth and third centuries B.C. Tarentum was at the height of her power and her prominence is reflected in a rich intellectual and artistic life. In philosophy, poetry and music she made important contributions, and her architecture, sculpture, pottery, jewelry, and coinage were of a high calibre.

Plunder and destruction have deprived us of much of this brilliant output, but enough remains with which to reconstruct the Tarentine civilization along broad lines. M. Willeumier is well equipped for this task by his many previous studies of South Italian culture and he has accomplished it with rare ability. He has given whatever evidence there is fully and impartially and has drawn his conclusions tentatively and with sound common sense. The result is a stimulating discussion of an absorbing subject.

The discussions of the works of art are particularly happy. The descriptions give essentials concisely and the interpretations show a wide scholarship. Though naturally much of the information is a résumé of known facts, there is also much that is original and a number of moot points are clarified.

We may mention a few of the many subjects discussed to show the wide scope of the book. The debated question as to whether the youth on the dolphin on Tarentine coins represents Taras or Phalanthos is interestingly presented with its many implications (pp. 36 ff.). The various versions of the discovery of the seated female statue now in Berlin and the doubts regarding its authenticity are dispassionately recounted, and the sensible and important conclusion is drawn that the statue is undoubtedly genuine (pp. 269 ff.). The well-known silver treasure—consisting of a phiale (stolen during the 1914 war from the Museum of Bari), a pyxis, two cups with central medallions, a kantharos, and a thymiaterion—is fully described, assigned to Tarentum, and dated in the late third century (pp. 338 ff.). The famous silver rhyton found at Tarentum and now in the Museum of Trieste is dated in the last third of the fifth century and the relief interpreted—with Picard—as probably Boreas and Oreithyia in the presence of Athena and Erechtheus (p. 336f.). Tarentine terracottas are treated at length, the various types enumerated, tentatively interpreted, and approximately dated (pp. 393 ff.). Though the

conclusions are not definitive and much work remains to be done, we now have a good résumé of this intricate subject. The theory that the persons represented in these terracottas are in part divinities, in part heroized dead, has much in its favor. A useful description of South Italian pottery is given (pp. 443 ff.) and Tarentum is claimed as one of the chief centers of its manufacture during the fourth and third centuries. A healthy scepticism is evinced throughout on recent claims of a Tarentine origin for marble and bronze sculptures. Especially in the case of bronze statuettes and small reliefs—which travelled easily and were presumably widely exported and transported—it would seem indeed hazardous to base conclusions on unproven hypotheses. It is more profitable to acknowledge our scant knowledge on this subject.

A few minor corrections and suggestions: Is it not misleading to say that the marble statue of a woman, pl. iv, 4—dated about 525 B.C.—"marks the transition from a xoanon to a kore" (p. 268)? Surely she is simply a kore. The male head, pl. iv, 2, does not necessarily represent Apollo but is better designated as a kouros, and the date is, I imagine, earlier than "the first quarter of the fifth century" (p. 275). Does not the ridge below the neck of the seated male figure on the Tarentine coin illustrated on pl. xxvi, 6 indicate a clavicle, rather than a necklace (p. 374)? To represent a chair in perspective in the late fifth century is hardly due to "the influence of Zeuxis" (p. 374), but is a common practice in the Greek art of that time, as we learn, for instance, from Attic vase painting. The Gorgons on the terracotta antefixes, pl. xxxviii, 2, 3 seem to me earlier than the late sixth century (p. 425 f.). I should suggest the second quarter and the third quarter of the century respectively. The influence of Pheidias on the art of his time was so dominant and widespread that it seems doubtful that the political rivalry between Athens and Tarentum in any way restricted it (p. 466); and it is even more doubtful, I think, that Phigaleia acted as an intermediary (p. 466). The sculpture of the temple of Apollo in that mountainous region has miraculously survived in fair condition and therefore looms large in our studies of Greek art. In the fifth century B.C., however, many other temples and sculptures existed that were more likely to influence Tarentine artists than those of the inaccessible sanctuary at Phigaleia. Though we happen to know that Lysippos made two colossal statues for



Tarentum, is it certain that these very statues exercised a "preponderant influence" on Tarentine art (p. 466) and introduced the Lysippian style into that region? This style had become practically a *koine* throughout the Greek world by the late fourth century.

The numerous illustrations—on loose plates in a separate portfolio—add greatly to the convenience and usefulness of the book. They are chosen with discrimination and include good maps of Southern Italy and the city of Tarentum. (It is a pity, however, to reproduce the Berlin seated goddess on pl. III from a photograph taken before the important additions to the throne were made).

M. Willeumier's fine treatise shows how much can be learned from detailed accounts of prominent Greek cities. The history of Greece is a composite of the histories of its many independent city states. To trace these separate yet interrelated stories helps in our understanding of ancient Greece. By focussing our attention on scattered units we may grasp better the significance of the whole. We hope, therefore, that more separate histories of prominent Greek city states, of the same distinction as M. Willeumier's, may be forthcoming.

GISELA M. A. RICHTER

METROPOLITAN MUSEUM OF ART

POLYBE ET L'HISTOIRE DE BÉOTIE AU III<sup>E</sup> SIÈCLE AVANT NOTRE ÈRE (Bibliothèque des Écoles Françaises d'Athènes et de Rome, fasc. 152), by Michel Feyel. Pp. 329. De Boccard, Paris, 1942.

This book, with a good index and numerous observations on lapidary writing in Boeotia, is, as Feyel himself says, a new contribution to the history of central Greece. Feyel has travelled in Boeotia and studied the inscriptions in preparation for this study (see my review in *AJA*, xlix, 1945, pp. 619 ff.). On pp. 85–93 he attributes to Demetrius II and not to Poliorcetes the decree *Sylloge*<sup>2</sup>, 330. He dates in 239–229, not 307–285, *IG*, vii, 1–14, 3473. The object of this book is to test and supplement the account of Polybius (xx, 4–7) about Boeotia in the years 245–192 B.C., the time when Rome definitely decided to interfere in Greece. Feyel limits himself to the years 252–200 B.C., the epoch when Alexander, son of Krateros, rendered himself independent and united with Corinth, Megara, and Euboea.

After an introduction on the fragment of Polybius, Feyel studies the chronology of all the federal archons known (including those named in

inscriptions of Aigosthena), then the foreign politics of the Boeotians, and finally the interior history, institutions, political and economic life, comparing the results with the text of Polybius. Feyel does not give us a list of inscriptions published since the appearance of *IG*, vii, nor a list of proxenies, and only a partial Boeotian prosopography on pp. 307–311. There is very little on the changes in dialect and writing. On pages 32–33, and 44, Feyel alters Holleaux's dates for the archons, substituting 237 for 225 as the terminus, and on pp. 73–74 is a long dated list of archons known from 365 to 172 B.C. In discussing the archons Feyel makes use of Dinsmoor, but often differs from him. He disagrees (p. 62) with Dinsmoor about the end of *stoichedon* in 229 B.C. and says that this style is still active till 215 B.C. and that there are examples in the second century B.C. He has not used Austin's book on *The Stoichedon Style in Greek Inscriptions*, where (p. 124) it is said that it "was virtually abandoned about 225 B.C. . . . The style was not quite extinct by 200 B.C." There is even an example from the third century A.D., the genealogical inscription from Oenoanda.

Feyel's chronological studies lead to two important historical results, namely that Aigosthena was annexed by the Boeotian League in 233 B.C. at the latest, and that Opous was Boeotian between 192 and 190 B.C. On pp. 80–81, in opposition to Dinsmoor, who is said wrongly to put the date of the Athenian archon Diomedon in 246/5, Feyel prefers Polybius to Plutarch, and thinks that Aratus did not march directly on Boeotia with his 10,000 men but that these men joined the Achaean army but did not depart for Boeotia. On p. 94 especially, doubt is thrown on the systems of Dinsmoor and Ferguson-Meritt, who have only one rupture in the cycle. Why should the cycle not have been broken two or more times but only once (in 263/2 or 248/7 or 243/2 or 246 according to Dinsmoor, all uncertain dates)? Hence, on p. 96 Feyel speaks of Dinsmoor's results, "à titre de pure hypothèse," leading to the date of the battle of Chaeronea as the spring of 243 or the winter of 244/3. According to Dinsmoor, Demetrius would have entered Boeotia in 233, and Feyel concludes that this entrance could not be later than 236 B.C. On p. 121 he rightly criticizes Edson and shows that the Boeotians were not allies of Antigonos after his return from Asia Minor, to profit from the amicable relation manifested at Larymna. Otherwise Polybius



would have mentioned such an alliance. Dow-Edson are wrong (p. 126) in thinking that Antigonos took the title of king before the expedition to Asia Minor. Polybius (xx, 5, 7) seems to say that he was only ἐπίτροπος.

The study of the military catalogues (pp. 207 ff.), of the lists of officers and dedications by soldiers, and of armaments, is important. Feyel concludes that the population of Boeotia was 100,000 and that the Confederation had an army of 10,000 infantry and 1000 cavalry. Conscription was limited to men 20 to 50 years of age (Beloch, 18 to 60). This shows the decrease in Boeotia's military power from the fourth century B.C., and it continues to get even worse by 200 B.C. so that the way is prepared for Roman occupation. Even Achaia in 207 B.C. had an army of only 15,000 to 20,000.

The chapters on economic and political life, on agonistics and on magistrates, are especially interesting. They even study the coins, especially Head's *History of the Coinage of Boeotia*. The Boeotian system of using not a drachm but a didrachm or stater is shown by the use of  $\Sigma =$  stater or two drachmas,  $\Sigma \Delta = 5$  drachmas (pp. 223-225). In 245 B.C. is dated the monetary reform, and farmers become prosperous and even lend money in 229 to Athens. But after 220, things become worse and money is difficult to borrow even at ten per cent. Boeotian cities must now borrow from foreigners, and Egyptian money becomes current. After 220 B.C. the former prosperity rapidly declines. Polybius is familiar with this difference between the periods 245 to 220 and 220-200 B.C. Boeotia accepts the hegemony of the Aetolians but introduces military and economic reforms, adopting the Macedonian system and the constitution of the Aetolian *étalon* and *agema*, as the inscriptions prove. Polybius knew all this and was not ignorant, but he had contempt for the Boeotians and great love for the Achaeans, whose attitude toward the Boeotians he reflects, so that he does not mention the subject. Whoever reads Feyel will no longer believe that the Boeotians were dense and stupid and witless "Boeotian swine" (see my *Pindar*, pp. 57-58). The Boeotians anticipated the representative parliament, an elective executive, and even a supreme court. They played a very important political role in Greek history before 221 which modern historians, owing to a wrong interpretation of Polybius and epigraphic ignorance, have ignored. Philip V (Walbank's good book on *Philip V of Macedon* is

not cited) is mainly responsible for the decadence of Boeotia and the destruction of Greece. He it was who prepared Greece to succumb to the Roman legions.

This book is indispensable to Hellenistic historians and has profited by the researches of Dinsmoor, Ferguson, Meritt, Fine, and Dow, but should have cited R. J. Bonner's excellent article on "The Boeotian Federal Constitution" in *CP*, v, 1910, pp. 405-417 (cf. now Bonner-Smith, "The Administration of Justice in Boeotia," *CP*, xl, 1945, pp. 11-23. Larsen also has written much on representative government in Boeotia, *CP*, xxi, 1926, pp. 66 ff., etc. A good recent article on Polybius is that of G. C. Richards of Oxford in *CJ*, xl, 1945, pp. 274-291). Dinsmoor, not I, should have reviewed this original and excellent book. Perhaps we shall hear from him when he takes up again the study of archons.

DAVID M. ROBINSON

THE JOHNS HOPKINS UNIVERSITY

CONTRIBUTION À L'ÉPIGRAPHIE BÉOTIENNE (Publications de la Faculté des Lettres de l'Université de Strasbourg, fasc. 95), by Michel Feyel. Pp. 170, pls. 6. La Haute-Loire, Le Puy, 1942.

The French have continued their archaeological and epigraphical publications even during the war. It is remarkable what French epigraphists such as Louis Robert and others have accomplished. Feyel, a student of the great master epigraphist, Maurice Holleaux, who has travelled much in Boeotia and made squeezes of which several are here reproduced, has actually published in 1942 two books, one on *Polybe et l'Histoire de Béotie*, and the above study of a certain number of Boeotian inscriptions of the Hellenistic epoch, many of which he has examined himself, a few of them unpublished. Many of the results, such as the history of the *Ptoia*, are incorporated more fully and better in the book on Polybius. It is to be regretted that Feyel has used Schwyzler but not Miss Edith Clafin's monograph on *The Syntax of the Boeotian Dialect Inscriptions* (Baltimore, 1905). He might have benefitted by publications of Boeotian inscriptions such as that on a hydria in the Rhode Island School of Design (cf. my article in *AJA*, xlv, 1942, p. 180, "New Greek Bronze Vases, A Commentary on Pindar."). The form αἰθλον might be cited in discussing ἄθλα (pp. 92, 95, 109). An unusual feature in recent French books are the indices of the publi-



cations and of the origin of the inscriptions, of proper names and ethnica, notabilia varia (French and Greek), grammar and dialect, mode of transcription and palaeography of texts.

There are eight chapters. The first is about federal decrees but does not use Larsen's studies or Bonner, *CP.* v, 1910, pp. 405-417. The acceptance of the Leukophryena of Magnesia by the Boeotian League in a federal decree (*Ins. von Magnesia*, 25) is well studied, especially the dialectical forms (line 1, θιαρὺ restored; line 25, Ἄπολλο[φά]νειν, confirmed by Klaffenbach on the stone in Berlin; line 4 is read as -πιδοσ Οὐ[τ]τιος), an ethnic of the village of Hyettos). The acceptance of a territorial asylum by the League is studied with a republication of *IG.* vii, 1720, in which Feyel recognizes a federal decree of the Itonion of Coronea, transported from there to Thespiea, and now in the museum at Thebes.

Chapter II has as its subject "Le prêt consenti aux Athéniens par les cités de Thèbes et de Thespies." Feyel here restudies minutely several inscriptions of Thebes and Thespiea and adds a new fragment, parts of four lines mentioning Athenians (229 B.C.), of which he has made a copy and squeeze in Thebes.

Chapter III is concerned with "Documents sur les tribunaux étrangers." One is a decree of Thespiea for judges sent to Delphi (*SEG.* i, 132) which Feyel cleverly restores and of which he discusses the date, especially on dialectic grounds. Feyel's restoration (p. 48) of the decree of Coronea for the judges of Akraiphia (*IG.* vii, 4145) is not so felicitous. Chapter IV (pp. 50-66, see for corrections p. 156), "Inscriptions erratiques" is very interesting. It deals with erratic inscriptions in a peculiar sense of the word. It gives a systematic treatment of those which have been transported from their original provenience in Boeotia (add *REG.* liv, 1941, p. 65). The majority of such cases have been from Thespiea to Thebes. Much is said about "Documents erratiques sur les Basileia et les Pamboiotia." The agonistic catalogues (*IG.* vii, 2871, near Coronea, and 1764, Thespiea) come from the sanctuary of Zeus Basileus at Lebadeia, and perhaps *SEG.* iii, 354, has travelled from Coronea to Thebes and then to Thespiea (Κορωνέων τὸ τέλος).

Chapter V deals with "Documents sur les Basileia de Lébadée aux II<sup>e</sup> et I<sup>er</sup> siècles av. J.-C., "with new restorations of *SEG.* iii, 367. Line 38 is rightly interpreted as the beginning of a letter,

but lines 34-35 are wrong. In the text (pp. 75 ff.) published by Holleaux, *Études d'épigraphie et d'histoire* i, 131, Feyel makes some good new restorations but badly interprets ἐγκριταί. On pp. 79-87 he publishes an interesting inscription found at Chaeroneia, in which he recognizes the accounts of an administrator of the sanctuary of Zeus at Lebadeia with a series of receipts and sale prices (add in commentary *IGR.* iv, 90, οἱ σκηνεῖται καὶ ἐργασταί. The tithes are δεκάτη τῶν ξηρῶν or ολνική, probably a Roman tax imposed by Sulla to help the *Basileia*).

Chapter VI, "Les Mouseia de Thespies," has many good suggestions such as recognizing in *IG.* vii, 1735, a decree of the *Technitai* of Athens, though line 9 does not have to read νικῶσιν for αὐλῶσιν. The restorations of B I and II (*IG.* vii, 1743 and *Inv.* 1545) are doubtful, as are those proposed (p. 96) for *BCH.* xix, 1895, p. 331, n. 5, which Feyel attributes to a decree of Oropus, and the restoration of a royal letter (pp. 104-105, C, lines 1-4). Two of the royal letters are attributed not to Ptolemy VI but to Philopator and his sister. The chronological study of the archons after the Mithridatic war with exact dates (p. 117) is an important contribution. On pp. 123 ff. Feyel publishes several new fragments of the accounts rendered by the agonothetes (*IG.* vii, 1743).

Chapter VII discusses "Les Ptoia." Feyel completes the decree of Haliartus (*IG.* vii, 4143) and publishes several new small fragments of decrees of Orchomenos and Lebadeia. Strange to say, he criticizes some unpublished rough notes of Holleaux after seeing the stone itself. Holleaux probably did not publish his notes, knowing that they should be verified from the stone itself. Feyel (p. 147) rejects Dinsmoor's date for Callias (224/3) and puts in 228-226 B.C. the Amphictyonic decree (*SIG.* 635), about the Theban festivals of Dionysos Kadmeios, in which he restores ἡ πόλις τῶν Θηβαίων δεδόχθαι and δεδόχθαι τοῖς Ἀμφικτιόνεσι. See now Feyel, *Polybe et l'histoire de Béotie*, p. 96.

Chapter VIII discusses a "Décret de Korai sur un emprunt public," publishing a new difficult text.

Despite doubtful restorations in many cases, this book is indispensable to every epigraphist and Hellenistic historian concerned with Boeotia and its relations with the rest of Greece.

DAVID M. ROBINSON

THE JOHNS HOPKINS UNIVERSITY



LA COLONISATION GRECQUE DE L'ITALIE MÉRIDIONALE ET DE LA SICILE DANS L'ANTIQUITÉ: L'HISTOIRE ET LA LÉGENDE (Bibliothèque des Écoles Françaises d'Athènes et de Rome, fasc. 150), by Jean Bérard. Pp. 562. De Boccard, Paris, 1941.

Now that the war is ended and excavation may be possible in Southern Italy and Sicily, such a book as this is valuable for the literary and historical material needed by the field archaeologist. There is nothing new in the book, but Bérard gives an excellent discussion. The book lacks much needed illustrations of the sites and especially of the ruins at Paestum, Cumae, Tarentum, Metapontum where fifteen Doric columns (Tavole Palatine) are preserved, Syracuse, Selinus, Acragas, Segesta, etc. There is, however, a good introduction on the history of the problems of the origins of Greek colonization in Magna Graecia from the ancient sources and from the Renaissance to the present day, with especial attention to Holm, Freeman, Pais, Beloch, Orsi, Pace, Ciaceri, Giannelli. The first part of the book is historical (Chapters I-VII); the second (Chapters VIII-XII) deals with the legendary traditions such as the legend of Ulysses, and throws new light on Homer's *Odyssey* (based mostly on five well-known but somewhat fanciful books of the author's father, Victor Bérard, without even a reference to Dörpfeld's two volumes, *Homers Odyssee*). Bérard has also advanced our knowledge of the *Nostoi*, and of other traditions.

The first chapter discusses Cumae, supposed to be the earliest colony, founded soon after that on the Pithekussai islands. Bérard thinks that the traditional date of 1049 B.C. refers to Cumae in Asia Minor and favors (p. 286) the second quarter of the eighth century, but pottery earlier than 775-750 B.C. has been found on the site, and some of us believe that the traditional date is nearly correct for the Campanian site (see for graves of the ninth century B.C., *AA.* xxviii, 160; Burn, *The World of Hesiod*, p. 179).

The second chapter discusses the Chalcidian colonies of Naxos, Leontini, Catana, Zancle, Rhegium, etc. Bérard neglects the Samians and the travelling mint which they took to Zancle-Messana and Rhegium (*JHS.* xxviii, 1908, pp. 56 ff.). The third chapter discusses the Doric colonization of Megara Hyblaea (ca. 727 B.C.) without much knowledge of the excavations there or of Highbarger, *The History and Civilization of Ancient Megara* (1927). Syracuse was founded ac-

cording to the Parian Marble in 757 B.C., according to St. Jerome in 738, according to Eusebius in 734, according to Thucydides in 733. There is no reference to O'Neill's, *Ancient Corinth* and no good account with illustrations of the topography and monuments and especially the pottery of Syracuse, which throw so much light on its history. Chapter IV discusses Peloponnesian colonization on the Gulf of Tarentum, Sybaris, Croton, Tarentum, and Metapontum. These are all good sites for further excavations, but Bérard's discussion (except for the ancient sources) is of little use to the archaeologist who has visited these promising sites as I have several times. Sybaris, which was destroyed by Croton and replaced by Thurii, deserves detailed consideration. Bérard mentions Noe, *Coinage of Metapontum*, and Lacava's mediocre book (1891) on *Topografia e storia di Metaponto* which I found inaccurate when I read it on the spot, but he is ignorant of Sir Arthur Evans, *The Horsemen of Tarentum*, and his several articles on Sicilian coins (*NumChron.* 1886, pp. 1-50; 1894, pp. 231-232; 1918, pp. 133-154; 1926, pp. 1-3). Especially neglected is a study of Corinthian coinage in Southern Italy and the boycotting of Athenian silver, which perhaps was one of the causes of enmity of Athens and Corinth and of the Peloponnesian War. Metapontum and Tarentum restruck Corinthian staters and nearly all the Italian cities used the Corinthian standard. Only Rhegium used Athenian silver for restriking (*AJP.* lxiv, 1943, pp. 139 ff.). Especially lacking is a study of Corinthian, Attic, and other vases in Southern Italy and Sicily. There is no mention of Laconian pottery at Tarentum (*BSA.* xxxiv, 1933-34, 181) though Willeumier's recent book (1939), *Tarente*, is mentioned. There is no account of Rhodian vases at Gela, a Rhodian colony, no detailed account of the temples at Paestum, and only a slight reference to the very important archaic temples and the sculptured metopes found 50 stades north of Paestum near the mouth of the Silaris river, as Strabo says (252), by Umberto Zanotti-Bianco and Madame Zancani-Montuoro. See *AJA.* xlii, 1938, pp. 441-444, pl. xvii. Chapter V discusses Siris, Locri and Posidonia; Chapter VI Gela, Akragas, Selinus, etc. Chapter VII, which with Chapter XI, is the one most worth reading, deals with archaeological contributions but it is unsatisfactory and not detailed or up to date.

Bérard barely knows (p. 289, n. 1) Blakeway's article in *BSA.* xxxiii, 1933, pp. 170 ff., but he would have benefited by reading the most impor-



tant works on his subject, especially Burn's book *The World of Hesiod* and Burn's article on "Dates in Early Greek History," *JHS*. lv, 1935, pp. 130-146, where (p. 146) Burn gives a table of dates of Greek colonies superior to that of Bérard on p. 101. Bérard also has failed to use Parke, *A History of the Delphic Oracle*, which cannot be neglected by any scholar interested in the oracles dealing with colonization. Pearson's *Early Ionian Historians* is also valuable for a study of S. Italy and Sicily, especially pp. 39-42, 157-159, 168 f., for the name and early history of Italy. The late Randall MacIver's books, *Italy before the Romans*, *The Etruscans*, etc., should also have been cited (see also *AJA*. xlvii, 1942, pp. 91-101, on the Symposium, "Who were the Etruscans?"), since Bérard deals at length (pp. 505 ff., citing only Ducati, *Le problème étrusque*) with the question of the Lydian origin of the Etruscans. Bérard's acquaintance with German literature on his subject is slight. He cites (p. 38) Wilamowitz-Moellendorff, but wrongly spells his name, as also Loeschke (p. 518). Let us hope that the forthcoming book of M. J. Perret, with whom Bérard differs much, will have more archaeological material on S. Italy and Sicily.

DAVID M. ROBINSON

THE JOHNS HOPKINS UNIVERSITY

LA QUESTION D'ORIENT DANS L'ANTIQUITÉ (Bibliothèque Historique), by *Pierre Waltz*. Pp. 368. Payot, Paris, 1943. 90 fr.

This is another of the many classical books produced in France during World War II. It is the tenth book by a well-known classicist whose translation of Polybius in four volumes (1921) and whose book on *Le Monde égéen avant les Grecs* (1934) made him known as a Greek historian. The book has a misleading title, since it neglects the subject, on which Valentin Müller, Frederick Grace, and others have written so much, the influence of Egypt, Assyria, Mesopotamia, and Persia on early Greek history and art. The book does not deal with the Far Orient or the Near Orient (Turkey, Egypt, Assyria, etc.). In fact, the book shows little knowledge of archaeology and art. Waltz is not acquainted with the recent important epigraphical and archaeological literature, which has changed so many details in our knowledge of ancient history. The book was started during the Balkan Wars of 1912 and 1913, when the author was struck by the resemblances between the ancient and modern situations, for

example those which provoked the duel between Athens and Philip, as in recent times the troubles between Greece and Bulgaria. And yet Waltz knows nothing of the excavations at Olynthus, not even about the treaty with Philip. He is unaware of the parallel between Athens' isolationism and Philip, who anticipated Hitler's methods of warfare and government (*divide et impera*), and how on his coins Philip even anticipated the Hitler gesture. But Waltz does show a constant persistence of certain elements which have led to similar solutions of similar problems in Greece and Italy. He has given us, with a bibliography at the end, but no index and no illustrations, a very readable and accurate, if not original, short survey of ancient history from 2500 B.C. to 395 A.D. There are chapters on Les Origines, La Colonisation Grecque, Grecs et Barbares du VII<sup>e</sup> au V<sup>e</sup> Siècle avant notre ère, Athènes et La Macédoine, Alexandre et ses successeurs, La Conquête Romaine (Chapters VI-VII), La Paix Romaine (VIII-IX), Les Invasions des Barbares et le Partage de l'Empire.

DAVID M. ROBINSON

THE JOHNS HOPKINS UNIVERSITY

MYTHES INCONNUS DE LA GRÈCE ANTIQUE, by *George Méautis*. Pp. 255. Paris, Albin Michel, 1944. 54 fr.

This little book, printed on poor paper, with chapters unnumbered and no index, but only a few misprints such as μεταφράσις on p. 226, presents a charming account of a few interesting Greek myths. They are not so unknown as Méautis suggests in his title. In the United States we used to bring up our children on Greek mythology, but now even students of English in our graduate schools are rapidly becoming ignorant of such myths. There is, however, no better cultural and educative material for children than these myths which deal with essential problems and attitudes of humanity. If there is not a reaction against the present neglect of classical studies, these stories will soon be *inconnus*, and Méautis' title will be correct. Professor Méautis is no narrow specialist but a true classicist, philologist and archaeologist, a widely read author of some eighteen important volumes in many different fields. It is, therefore, a pleasure to have a readable but accurate book, written without pedantry and in a style which only the French possess. The ideas presented are not so original as the author maintains, and many are an expansion or restatement



of those put forth in his charming book, *L'Âme hellénique d'après les vases grecs*.

The Greek myths were not the fantasies of infantile and naïve spirits, but contain treasures and lessons of wisdom and experience which our material modernism should not neglect. Greek mythology is the result of the meditations of a poetical age, a philosophy evolved from a study of all human problems, which will compare with any modern philosophy, and which inspired Plato, Goethe, Dante, Browning, and many other great minds. The story of Ixion is not only that of the first murder but the myth of human ingratitude. Méautis discusses it in detail, following in the main Pindar's version in the Tenth Pythian and showing its development and influence on Plato, Dante, Goethe, etc. "Il s'apparente aux plus hautes et plus sereines inspirations de l'esprit humain, aux visions d'un Dante ou d'un Goethe; il montre le trésor de sagesse et de vertu que la mythologie contient." Dionysus is the myth of the power of fascination. Its development is traced in literature and art from the Homeric Hymn (incorrectly translated by Jean Humbert) to the *Carnet de Route du Juif Errant* of Alexandre Arnoux, 1931, from Brygos to the Pompeian painting of Pentheus. Méautis again rightly interprets the figure on the inside of Exekias' kylix in Munich as referring to the story of the pirates in the Homeric Hymn (Furtwängler notwithstanding), and not as Hercules, as Coca-Cola advertisements do. I miss a reference to Alfred Noyes' use of the myth in *Bacchus and the Pirates*.

Among the myths of love are Hippodameia, Penthesileia, Amymone, and Proene. The story of Penthesileia takes us into the world of grandeur and of heroes. In no literature is there "une scène plus hardie, plus noble et plus grande que celle de cette rencontre d'Achille et de Penthésilée, de cette rencontre de deux âmes qui se reconnaissent alors qu'il est trop tard, de ce héros qui trouve une héroïne." The beautiful scene, so simple but full of emotion, on the interior of the famous kylix in Munich, is illustrated on the cover of this charming book. The story may have influenced even Wagner in his story of Siegfried and Brünnhilde. The story of Amymone is like a lamp which lights up the most secret corners of the human soul. It is a myth of reconciliation. Méautis neglects to mention the many representations on Greek vases, as for example the beautiful little hydria in the Metropolitan Museum (Richter-Hall, *Attic Red-Figured Vases*, pls. 167, 172).

The last chapter (pp. 95-225) is entitled "Les Mythes de Mélancolie," but mainly treats again Achilles and the problem of death, with much admiration of the veritable Greek miracle, the divine Homer, "le poète de notre civilisation occidentale, ses poèmes sont les solides fondements de la pensée qui, de la Grèce à Rome, s'est transmise jusqu'à nous." Méautis shows how Greek vases, especially those of Euphronios and Exekias help us understand Ajax. But this must not be a long review, and I quote in conclusion the last sentence, "L'adultère d'Hélène, la mollesse de Pâris, la veulerie de Ménélas feront encore mieux ressortir la tendresse d'Hector pour sa femme et son fils, l'amitié d'Achille pour Patrocle, l'affection paternelle de Priam pour Hector, et c'est bien là, encore plus que dans la beauté de la forme, dans la splendeur des images, que réside la valeur éternelle d'Homère."

DAVID M. ROBINSON

THE JOHNS HOPKINS UNIVERSITY

LA CIVILISATION DE LA GRÈCE ANTIQUE (Bibliothèque Historique), by Maurice Croiset. Pp. 351, pls. 16, maps 2. Payot, Paris, 1943. 84 fr.

This book, with no index, is an enlargement of the author's *La Civilisation Hellénique* (1922), but it deals more with the causes of the different events and is an exposé of Greek civilization and not a real history. The distinguished classicist Croiset, who died in 1935 at the age of 89, was well qualified from his unique knowledge of Greek literature (cf. A. and M. Croiset's five volumes, *Histoire de la Littérature Grecque*, Paris, 1910-1921) and from his position as administrator of the Collège de France to study the various social organizations, occasioned by a too strong public authority which hampers the individual or by a too loose social discipline which brings civil disorder. There are several Greek civilizations, but Maurice Croiset attempts a work of synthesis and a general view of the civilization of ancient Greece. Unfortunately this book (though there is no statement to that effect) seems to be a reprint, with only slight revision of that issued in 1932. Croiset himself, if he had lived, probably would have made a better revision.

One cannot know Greek civilization without a detailed knowledge of Greek art and archaeology. One can learn as much about Greek civilization and social ideas from Greek art as from Greek literature. It is in this field that the book is weak. Croiset's knowledge of Greek sculpture and vases



and architecture is out of date. He cites in the bibliography (pp. 347-349) only French works such as Perrot and Chipiez (a very untrustworthy and unoriginal source), Collignon, Girard, Benoit, Lechat, De Ridder and Deonna. Not a word about the contributions to the study of Greek civilization made by the great books of Beazley, Miss Richter, Miss Swindler, Robertson, Ferguson, Meritt, and the many articles of Dinsmoor and Carpenter, to say nothing of Furtwängler-Reichhold, Ashmole, Hinks, Homolle, Roussel, Haussoulier (these three French), and a host of others. Not a word about domestic life as revealed by the Greek houses of Olynthus, Priene and Delos. Not a word about Greek mosaics at Olynthus, Corinth, Delos, etc. Among the all too few illustrations Greek vases are represented (pl. xvi) by two of the Nicosthenes Painter, one of the worst Greek vase-painters. As Beazley (*Attic Black-Figure*, p. 24) says: "The love of garbage is something from which very few of us are immune." What about Euphronios, one of the world's great animal painters, Brygos, Duris, the Meidias Painter, the Achilles Painter, the three painters named Polygnotos, etc.? The illustrations of the Parthenon (pl. v) and of the Erechtheum (wrongly spelled *Erechteion*, pl. vi, as also on p. 203) were long ago antiquated. We should have views with the replaced columns of the Parthenon and the long ago replaced walls of the Erechtheum.

The study of early Greek civilization is based on Glotz, but the account of Homer is bad. The only American cited about Homer is Milmann (*sic* for Milman) Parry, who put forward an uncertain peculiar theory of traditional formulas and tags, as if Homer took these from a prehistoric rhyming dictionary and were a kind of missing link between a chattering ape and an evolved Vergil. Croiset does not know the important school of Geneleos and other Samian sculptors, does not even mention Sappho or the wonderful new poems, one of four stanzas recently found on a vase fragment. Pindar is mentioned for the epinician odes, but there is nothing of his eternal ideas, of the paeans, including the only poem by a great poet on the total eclipse of the sun, nothing about the many new interesting fragments (see my *Pindar*, pp. 31, 99-108). The Parthenon is said (p. 201) to have been built 447-438, whereas the pedimental sculptures were still uncompleted in 432. Ictinus was the architect and Phidias the sculptor. What about Callicrates as co-architect,

if not the more important architect responsible for the curves and refinements. What about other "Masters of the Parthenon Sculptures?" The building was originally white (not yellow, p. 202). The yellow is due to oxidation and time. The "Theseion" (p. 202) is the "Hephaisteion" and does not date 468 to 456 B.C. Dinsmoor (*Hesperia*, Suppl. v, 1941, p. 156) now says that it was begun in 449. The Erechtheum was not begun in 435 B.C. (p. 203), but about 421 B.C., and it had no Caryatids but a porch of *Korai*. The temple at Bassae had three Corinthian columns, not one, on the inside. The Temple of Aphaia (better called the Temple of Athena) was not built after Salamis (pp. 204-205) but about 485 B.C. Myron is mentioned after Polyclitus and wrongly called a Boeotian and his contemporary, "le béotien Myron." Even Eleutherae belonged to Attica, not Boeotia. Of course, there is no acquaintance with the many recent discoveries in sculpture, vases, and other fields of archaeology which contribute so immensely to our knowledge of Hellenic civilization. But Croiset's book is very readable and enjoyable and sane. He certainly demonstrates again the lesson which the modern atomic world is forgetting that the Greeks have bequeathed much which is still profitable to humanity, "une source merveilleuse de sagesse, de lumière et de beauté." We archaeologists all share in this "sentiment d'admiration et de reconnaissance pour cette petite nation de l'antiquité à laquelle nous devons tant." We love Greek literature, philosophy, Greek history, and even the contributions to science by the Greeks, who gave us the theory of the atom which led ultimately to the discovery of the atomic bomb. But we realize that Greek archaeology and art have made just as great a contribution and must be studied with literature and philosophy.

DAVID M. ROBINSON

THE JOHNS HOPKINS UNIVERSITY

MÉMOIRES DE LA DÉLÉGATION ARCHÉOLOGIQUE FRANÇAISE EN AFGHANISTAN. TOME I. LA VIEILLE ROUTE D'INDE DE BACTRES À TAXILA, par A. Foucher, avec la collaboration de Mme. E. Basin-Foucher. Vol. I. Introduction. Première et Deuxième parties. Paris, Les Éditions d'Art et d'Histoire, 1942. Pp. viii+173, pls. xxxii.

The text consists of three parts. The first deals with the ancient trade route between India and the Northwest. After a general introduction on



the importance and geographical situation of this route, which provided the only connection between India and the outer world and which has existed from time immemorial up to the present day, a detailed description of the whole route from Bactria across the Hindukush to Taxila is given, taking into account the geographical conditions which determined the course of the route and the various stations. It is an excellent and well digested summary of travels made from 1922 to 1925 and also of the historical and geographical studies, written in a vivid and picturesque style and illustrated by good photographs and maps. In some places the modern route deviates from the ancient one, as the authors point out very convincingly, because of the shifting of important towns for political reasons. The starting point is now Mazar-é-Merif and not Balkh, the site of ancient Bactria, situated farther west. Kabûl was not on the route, because the capital of the region at that time was located ca. 50 km. farther north at the Nikaia of Arrianus and the Kapiçt of the Chinese traveler Hsuan-Tsang; nor was Peshawar on the route, but Pusharāvati, the capital of Gandhara, also farther north. It follows that not the famous Khaiber pass was used, but that of Mishni and that the Indus was crossed at Ound and not at Attock. The end of this part of the route has likewise shifted from Taxila to Rawalpindi.

The second part deals with the excavation of Bactria and is in the form of letters addressed by the excavator to the president of the Commission archéologique d'Afghanistan at Paris, Mr. E. Senart, a fact which gives the report a personal touch. It is rather pathetic reading to see the utter disillusionment of the excavator after his arrival at the place. He had come with the glowing picture in his mind developed by a number of scholars that Bactria would be one of the wonderful Oriental cities with splendid ruins like Palmyra and filled with the riches of the three ancient worlds, the Mediterranean, the Indian and the Chinese. Instead, he found a desolate and barren site, consisting of dust and earth. His greatest disappointment was that stone had not been used as building material as in India, seldom even burnt bricks, but mud bricks and pisé which had disintegrated because of the severe climate into a thick and heavy mass. Layers of such earth with stripes of ashes indicating the use of wood was nothing he was accustomed to cope with. There was no prospect of finding great works of

art which, put on exhibit at Paris, would surprise the world. Coins, pottery, gems *et cetera* could be distinguished in the layers, it is true, but he did not care about them and no sherd is described or illustrated. Foucher tries to explain this lack of monuments and comes to the conclusion that there was never any real art in ancient Bactria and that not even an industry developed there. Bactria is and was a part of Turkestan and as such a "bourgade," namely an asylum for the proprietors of the nearby fields, a meeting place for the nomads, a bazaar and finally a temple for the people of the region. And the materials were the same used throughout all times, mud and wood.

There is no doubt left that the "mirage" of a Bactria as a monumental city has disappeared before our eyes, but the possibility remains that an expedition consisting of a number of experts trained in excavating structures of mud and wood and familiar with pottery and other minor arts will be able to reconstruct the history of this borderland of civilizations from the earliest time onward and solve the problem of "Bactrian" art of Hellenistic times (cf. *AJA.* 46, 1942, p. 245). The site of Bêgrâm looks not less barren, yet it has yielded the most astonishing and valuable finds recently.

In spite of his shattered hopes, Foucher began to excavate courageously and with some success at least in regard to post-antique buildings. He laid bare enough of a Buddhist stupa to attempt a reconstruction and to trace the history of it. The name of the ruin is Töp-e-Rustam. It was erected in the typical style of the Gandhara period in the second century A.D., badly damaged, probably by the Hephthalite Huns, shortly after 425 A.D., awkwardly restored about the middle of the sixth century, and finally ruined by the Arabs who invaded the region in 652 A.D. His next object was the "Arg," undoubtedly the citadel since early times and, therefore, a promising site. He found a "serail" built after the sack of Bactria by Changir Khan in 1220, showing some interesting rooms, that is, a little mosque, an octagonal room, a bath, cisterns and furthermore, fragments of decoration in painted and gilded stucco and in stone, the apparent absence of which had so discouraged the author before the excavation; he even detected the use of "quasi imputrescible" wood. But he was not able to discover any traces of buildings belonging to the Sassanian or earlier periods.

The third part of the publication describes visi-



ble ruins along the route and gives very valuable advice for their future exploration. We might mention some of the important ones. First, north of the Hindukush, there is a stupa and grottos hewn from the rock at Haibāk. Of the antiquities of Bāmyān only those are described which were not published earlier. The most interesting one is the Ajdaha, a rock with mineral deposits on top in which Buddhist monks saw a "svayambha," that is, a representation of Buddha lying on his deathbed, and the moslems, a slain dragon about which a special story is told according to an ingenious hypothesis of Foucher. South of the Hindukush the monuments of Bēgrām are briefly described, others around Kābul and farther south as far as Taxila.

BRYN MAWR COLLEGE      †VALENTINE MÜLLER

TEXTILES DE PALMYRE, DÉCOUVERTS PAR LE SERVICE DES ANTIQUITÉS DU HAUT-COMMISSARIAT DE LA RÉPUBLIQUE FRANÇAISE DANS LE NÉCROPOLE DE PALMYRE, Vol. III, by R. Pfister. Pp. 102, pls. 16, and 3 pls. in color. Paris, Les Éditions d'Art et d'Histoire, 1940.

The first two volumes of this publication appeared in 1934 and 1937. Together with the third volume they represent an admirably careful study of the textiles found during successive excavations of several tomb towers of the necropolis of Palmyra. The tomb towers were built around the turn of the first century and the textiles found in them can be presumed to date from the first through the third century of our era.

In the third volume M. Pfister has continued the method and approach employed in the first two. He separates the discussion of his finds into three sections: (1) linens and cottons, (2) woolens, (3) silks. Except for many of the plain linens which show no particular interest, each piece of textile is taken up individually and analyzed in detail. The numbering of the pieces in the three sections is continuous through the three volumes. M. Pfister gives the location in which the textile was found, the nature of its material, color and weave, a microscopic analysis of the thread as to its width and twist, a count of the density of the weave, a chemical analysis of the coloring matter, and description of the design of decoration.

The great majority of the textiles are, of course, linen, because of the purpose to which they were put. The mummies were without exception wrapped in linen and only the outside covering consisted of decorative woolens and silks which

have in large measure disappeared. Only small fragments of wool and silk have been preserved in folds and other protected places. The linen pieces are of simple weave, of varying degrees of fineness, and are never dyed. They are decorated with bands of purple wool which have in many cases disappeared. The purple wool sometimes bears a design in white thread of maeanders and other geometric patterns. Exceptionally, a thread of gold (with a silk core) is used for decoration. It is interesting that the linen pieces, as also the woolens and silks, were not created for their funerary purpose but were used pieces, such as scarfs, tunics, etc., and have allowed M. Pfister to make some observations about the Palmyran costume.

The fragments of wool are often decorated simply with bands of purple, but a number of woolen fabrics are red and have polychrome tapestry decoration of bands of stylized foliage, alternating with series of plain shaded bands going from red to black. The bands of stylized foliage use Hellenistic formulas, strongly orientalized. The shaded bands are also found at Dura and seem to be a Syrian specialty. The richness of the woolens with tapestry decoration is emphasized by the somberness of the coloring, only warm hues being used.

The silks are for M. Pfister of greatest interest and have provoked most controversy. He believes that they are almost without exception of Chinese origin, and furthermore, that they were of great influence on both the weaving technique and the decoration of Near Eastern textiles. The most important in this group are a number of figured silks with designs of circles and lozenges enclosing opposed pairs of dragons and of birds. Maeanders, heart-shaped leaf patterns, grotesque masks—reminding of the Tao-T'ie—and other motifs also appear in these silks. The style as well as the iconography point to the Far East. (On the basis of the first two volumes Miss Ackerman, *Survey of Persian Art* i, 1938, pp. 688-689, had found M. Pfister's discussion of the iconography inadequate, while she herself believed that at least some of the elements of the iconography were Parthian). In addition, M. Pfister gives a number of other weighty reasons for his attribution: the use of the mechanical loom which must be assumed for these fabrics, and for which we have no proof in the West at this time, the use of the warp to form the design, the nature of the thread, and the coloring matter used.



The attributions and arguments were put forth by M. Pfister in his earlier volumes as well as in the present third volume and in part this volume consists of further documentation for his theses and of refutation of arguments brought forth by others against him since the publication of his first two volumes. (J. F. Flanagan, *Burlington Magazine* lxxvii, 1935, pp. 92-93; M. Th. Schmitter, *RA. Sixième Serie*, xiii, 1939, pp. 73-102. Miss Ackerman, *Survey of Persian Art* iii, 1939, p. 2183, takes the side of M. Pfister against Flanagan in the question of China or the Near East).

The controversy over the old question China or the Near East is herewith by no means solved. However, by his exceedingly careful and exhaustive study of the varied material found at Palmyra, M. Pfister has made a very valuable contribution to the solution of this question as well as of many others.

It is only a few decades ago that we knew practically nothing of the Graeco-Oriental textiles of the first three centuries of our era. By a series of very important finds in Mongolia, Central Asia, the Crimea, and the Near East this has been changed greatly, and we now have the material for a comprehensive comparative study, which is greatly needed and which would advance our knowledge considerably and should be undertaken.

MUSEUM OF ART HERWIN SCHAEFER  
RHODE ISLAND SCHOOL OF DESIGN

L'ANNÉE ÉPIGRAPHIQUE: ANNÉE 1940, by Alf. Merlin and Jean Gagé; ANNÉE 1941, by Alf. Merlin; ANNÉES 1942-1943, by Alf. Merlin. Pp. 91, 71, 43. Presses Universitaires de France, 1941, 1942, 1944. 40 fr., 40 fr., 50 fr.

The present world situation makes it imperative to call the attention of scholars to publications which by their very nature would not be reviewed in normal times.

*L'Année épigraphique* was founded by René Cagnat, the most distinguished Latin epigraphist of France. Each year it listed the texts of Latin inscriptions (and Greek inscriptions *ad res Romanas pertinentes*), which had been published in periodicals during that year, and referred to other publications of epigraphical interest. Indices greatly increased the value of this work which soon became indispensable to epigraphists and historians alike. For half a century Cagnat took charge of his creation. When he died in 1937, Alfred Merlin and Jean Gagé continued the work

with equal success. It is amazing that they were able to bring out as many as three volumes during the German occupation of France. Jean Gagé, who was a professor at the University of Strasbourg at the time of the German invasion, signs only as editor of the 1940 volume.

The editors had access to a number of publications which have not yet reached this country. But also they were hampered by the rapidly decreasing availability of publications and by the universal paper shortage. Merlin was forced to combine the volumes 1942 and 1943 and to present of the greatly reduced material only a selection referring to *l'Afrique romaine*. This is largely identical with French North Africa. The other inscriptions of 1942-3 will be published in a future volume.

The scholarly level of the three fascicles is as high as ever. Critical remarks and additions are always to the point. Among the 537 numbers which make up the three volumes some of the most important documents may be mentioned here. I shall exclude on principle those items which are already known in the United States and in Britain. References to the original articles excerpted by the editors had to be omitted. The three volumes are quoted as 1940, 1941, 1942-3.

Starting our survey with the city of Rome and Italy, the inscriptions from two sanctuaries deserve first mention: from the famous *Dolichenum* on the Aventine Hill, published by A. M. Colini (1940, no. 71-81; cf. previously, A. M. Colini, *BullComm.* lxiii, 1935, pp. 145-159) come two altars dedicated by a *collegium Herculis metretariorum* (inspectors of measures of liquids) *quod consistit ad salicem* (dated in 150 A.D.), and two new inscriptions (no. 75-76; cf. 77) in which figures the priest and *pater candidatorum*, M. Aurelius Oenopio Acacius (cf. Dessau, *ILS.* 4316). With the latter inscriptions no. 78 and 79 are also connected. The epigraphical evidence shows that the cult in the *Dolichenum* on the Aventine reached its climax under the Syrian emperors. It may be mentioned here that A. H. Kan, author of the study *De Iovis Dolicheni cultu*, Diss. Groningae, 1901, has now published in German a larger work, *Juppiter Dolichenus. Sammlung der Inschriften und Bildwerke*, Leiden, 1942, in which 297 monuments are treated (1942-3, p. 35).

Another sanctuary which yielded important inscriptions is a Mithraeum, also located on the Aventine, near S. Prisca. One of them is dated in 202 A.D. (1941, no. 75-78; cf. now A. Ferrua, "Il



Mitreo di S. Prisca," *Monumenti di Roma*, ser. 1, no. 3, Roma, 1941).

Fragments of *elogia* were published by A. Degrassi as appendix to *Inscript. Italiae* xiii 1 (of C. Cornelius Cethegus, cos. 197 B.C. and Romulus; 1941, no. 59-60).

Very interesting is the base of a silver bust of the emperor Tiberius put up in Teate (Chieti), to fulfill the will of a centurio of the *Legio VI Ferrata*, by C. Herennius Capito, procurator of Iamnia, known through Iosephus and Philo for his conflict with Agrippa (I) and the incident of Iamnia under Caligula (1941, no. 105).

M. Cagiano de Azevedo has succeeded in identifying the erased inscription in back of the relief from Puteoli in Philadelphia as a dedication by the city of Puteoli in honor of Domitian dated in 86 A.D. (1941, no. 73), confirming thus J. Sieveking's conjecture (*SB. Bayer. Ak.* 1919, no. 6, p. 6).

A base dedicated to Aesculapius as *conservator* of the emperors Marcus and Verus by a *honorat(us) colleg(ii) fabr(um) tignar(iorum)* is the earliest epigraphical evidence of Aesculapius as *conservator Augustorum* (1941, no. 69). A new list of members of this distinguished *collegium* is published by C. Pietrangeli (1941, no. 71; with corrections by Merlin). In connection with these documents the fragments of a rescript from the beginning of the fourth century and addressed to the *praef. urbi* may be mentioned for it deals with a *collegium* (1941, no. 68). The last three inscriptions were found in Rome.

From the Via Praenestina come two noteworthy funeral inscriptions: *Ti. Claudii Athenodori f(ili) qui Melitonis Germanici medici* (1941, no. 64), apparently a physician of Claudius who died before his master became emperor (for *Germanici* cf. Dessau. *ILS.* 1723: *Proculus decurio Germanorum Ti. Germanici*). Melito is mentioned by Galen xiii, p. 843, Kühn, and had previously been dated in the first century at the latest, rightly as now appears (*RE.* xv, 553). The form of the new inscription is peculiar on account of the *F.* and perhaps open to another interpretation. The other inscription names *Ti. Claudius Herma qui Sideropogon* (iron beard) *appellatus est, historiarum scriptor* (1941, no. 65).

The most outstanding *cursus honorum* among the documents from Italy is the sepulchral inscription of the proconsul P. Cluvius Maximus Paullinus published by A. Degrassi (1940, no. 99; cf. Groag, *PIR.* ii<sup>2</sup>, p. 287, no. 1204 a).

In the material from the Balkans stands out the

inscription from Garduna recording the construction of a water tower after 145 A.D. by the *leg(atus) Aug(usti) pr(o) pr(aetore) (provinciae Dalmatiae) Sex. Aemilius Equester* (cf. about him *PIR.* i<sup>2</sup>, p. 54, no. 342) and the prefect of the *coh. VIII vol(untariorum)* M. Caecilius Africanus (1940, no. 176; cf. 1941, no. 54). The latter officer is identified by Merlin (following M. Abramšč?) with the juriconsult, pupil of Salvius Iulianus (*PIR.* ii<sup>2</sup>, p. 3, no. 18) whose name, however, is *Sex. Caecilius Africanus*.

Other inscriptions from southeastern Europe include a dedication to L. Caesar the "hero," by the city of Thasos (1941, no. 125), dated between 2 and 4 A.D., and the tombstone of two soldiers of the *Leg. II Ad(iutrix)* killed near Aquincum in Pannonia in *exped(itione) [G]ot[ar]ica*, sometime during the third century (1941, no. 10).

From Calymna in the Dodecanessus, which belonged to the province of Asia, M. Segre reports bases of statues erected by P. Servilius Isauricus, proconsul of Asia 46 to 44 B.C., and by the praetor Manius (Iuventius) Laterensis, who is identified with the well known praetor of 51 B.C., often mentioned by Cicero, although the latter and others consistently refer to him as M(arcus) (1940, no. 129).

A milestone found not far from Palmyra shows that L. Fabius Iustus, the addressee of Tacitus' *Dialogus de oratoribus* and *cos. suff.* of 102 A.D., was *leg. Aug. pro pr.* of Syria in 109 A.D. (1940, no. 210).

Among the numerous inscriptions from Africa are: the dedication to Mars Augustus by the proconsul Cossus Lentulus in celebration of the end of the *Bellum Gaetulicum* (6 A.D.?), found in Leptis Magna and published by P. Romanelli (1940, no. 68), a milestone in Leptis Magna which bears the name of the proconsul L. Aelius Lamia, to be dated probably in 15-16 A.D. (1940, no. 69), a sepulchral inscription from Lambaesis, remarkable for containing a variant of the distich on Balista ascribed by the *Vitae Vergilianae* to Vergil (1941, no. 43).

From Banasa in Mauretania Tingitana comes a new military diploma (the third from this place: *CIL.* xvi 73, 121-128 A.D.; cf. *Année ép.* 1936, no. 71. *Année ép.* 1936, no. 70, Oct. 14, 109 A.D.). It is dated Nov. 18, 122 A.D., giving us the names of the *cos. suff.* then in office, C. Trebius Maximus and T. Calestrius Tiro (1942-3, no. 84). Only a little earlier are the fragments of another diploma discovered in Volubilis (1942-3,



no. 83). Volubilis furnishes also an inscription listing the decorations of a centurio who had taken part in [bell]o Commageno[rum] in 72 A.D. and in [bello Ge]rmanico under Domitian (1942-3, no. 33), and the tombstone of a *Syrus negotians* (1942-3, no. 21), whereas Banasa gives us yet another inscription with the *cursus honorum* of Sex. Sentius Caecilianus, dated in 75 A.D. (1941, no. 79; cf. on him Dessau, *ILS.* 8969 and A. Merlin, *Inscriptions lat. de la Tunisie*, Paris, 1944, 623-4).

A milestone of the emperor Decius dated in 251 A.D. found in southern Tunis deserves notice because the emperor here, but nowhere else, is called *Germanicus Maximus* (1942-3, no. 55). The list may be concluded with Merlin's nice discovery that the fragments *CIL.* viii 800 (cf. 12267 and 1177) belong together, a dedication to Antoninus Pius and Marcus Aurelius by the Egrilii Plariani, father and son, proconsul and legatus in Africa in 159 A.D. (1942-3, no. 85; cf. now Merlin, *Inscript. lat. de la Tunisie*, 672).

Let us hope that Merlin and Gagé will soon be able to present us with the continuation of their excellent work.

HARVARD UNIVERSITY

HERBERT BLOCH

*LE CHRIST*, by Charles Guignebert. Pp. xxix+408, map. (L'Évolution de l'Humanité, Synthèse Collective, dirigée par Henri Berr). Éditions Albin Michel, Paris, 1943. 68 fr.

In the same year, 1943, two volumes by competent scholars appeared to challenge a view commonly held as to the nature and development of primitive Christianity, and particularly as to the relation of Paul to Jesus. One was Dr. W. F. Stinespring's translation of Rabbi Joseph Klausner's *From Jesus to Paul*, written in Jerusalem and published in Hebrew in 1939. The other, which reached this country only this summer, is the volume under review. The idea common to the two writers is one that has frequently been proposed in the past and, indeed, was outlined in Guignebert's *Christianisme antique* (1921); viz., that Paul was not the true Pharisaic Hebrew he thought himself to be, but a Hellenized Diaspora Jew. Therefore, without realizing it, he made a sharp break with the primitive Christian tradition. Here Guignebert presents the arguments for the thesis with fullness, clarity, and force.

In Henri Berr's growing *Synthèse*, in the section on the "Origins of Christianity," Adolphe Lods has already published two authoritative volumes

on Hebrew history and Guignebert two, one on *The Jewish World in the Time of Jesus* and one simply entitled *Jesus*. These four have been translated into English in the series "History of Civilization," edited by C. H. Ogden. It is to be hoped that this volume may follow its predecessors into English. Guignebert was to have written two volumes covering the beginnings of Christian history, one on *The Christ*, the other on *The Church*. Only a half of the first was measurably complete when death overtook him in 1939, at the age of seventy-two. The manuscript was edited (with certain additions from other papers) by Mlle. Marguerite Brunot, first his pupil and then for many years his secretary and collaborator.

The two titles, *Jésus* and *Le Christ*, in themselves announce Guignebert's conviction that the Galilean Jesus, although he was the *cause originelle* of Christianity, had no intention of founding a new religion and foresaw neither the church nor Christianity. His religion was that of the *Torah* as understood by the 'anawim, the "poor" of Israel. He did not consider himself the messiah, and during his lifetime was not so regarded by his disciples (a questionable view). He proclaimed the coming of God's reign, and, like many another messianist, he died for his dream. But, by the faith of his disciples, he conquered death and was soon transformed into the heavenly Christ and Lord of the Christian cult. The present volume was intended to describe the fascinating process by which this change came about.

In striking contrast to Klausner, Guignebert is, as usual, vigorously critical in his use of the New Testament sources, but neither unreasonably nor dogmatically so; indeed, although occasionally capricious, he is less so than in his *Jésus*. Long and in some cases superfluous discussions, especially of apocryphal writings, lead him to depend chiefly on eight of the Pauline letters, Romans, I and II Corinthians, Galatians, Philippians, Colossians, I Thessalonians, and Philemon. Although all may have suffered minor interpolations and alterations and some are badly edited combinations of letters, their chief obscurities and inconsistencies are due, not to editorial meddling, but to their author's facile adaptability and to the fact that "the epistles are not lessons in doctrine, but instructions suited to circumstances, based on oral teaching unknown to us." Deissmann's distinction between "letters" and "epistles" is accepted only in part, on the ground that Paul's writings are to a certain degree literary and official. How-



ever, when Guignebert calls them *lettres de circonstance*, he practically admits Deissmann's contention. Paul's language is not purely colloquial *Koinē*, but partly classical, partly literary *Koinē*. This again is practically equivalent to Deissmann's view. "Classical," indeed, is misleading. All *Koinē* Greek used classical expressions.

The Book of Acts is regarded as an entirely secondary source, and the early part (1-12) as quite untrustworthy; the second part (13-28), where it is not directly contradicted by the letters, is extensively used for the historical framework. Surprisingly little reference is made to epigraphic and archaeological materials. This is explained partly by the full discussion of Diaspora Judaism in two chapters of *The Jewish World*, which were originally written for this volume and which are an essential preparation for the main thesis of the book, partly by the author's preoccupation with the history of dogma.

According to Guignebert, Paul's gospel was based upon what he had "received" (I Co. 11, 23; 15, 3), not from the Palestinian disciples of Jesus at Jerusalem, but from Hellenized Jews who, before him, had accepted belief in Jesus and had begun the transformation of the simple eschatological hope of the first Christians into a gospel of salvation. Antioch, not Jerusalem, was the first Christian "capital." Guignebert rejects as mistaken inference the accounts, which the author of Acts puts into Paul's mouth, of his rabbinical education at Jerusalem. His acquaintance with the mystery religions, both Greek and Oriental, and with Hermetism made it easy for him to continue the reinterpretation of Christianity to meet the needs and ideas of the diverse groups of Hellenized Jews and pagan seekers after God. Paul's use of Hellenistic Greek and his combination of Stoicism and mysticism prove that, whether he came into contact with Hellenism directly, or indirectly through Hellenized Judaism, he was profoundly influenced by it. His letters prove how readily he responded to new situations and adapted his thinking to new cultural and religious environments. He was at the same time a Jew, a Greek, and a Roman. He could easily be all things to all men. His conversion and his religion as well are explicable only when he is seen as "a Jew of the Dispersion, a Pharisee Hellenized and syncretized, ardent and mystical," who found in Christianity regarded as a doctrine of salvation "the harmonization of his unconscious aspirations as an Asiatic and his hopes as a Jew."

In view of Guignebert's critical and original contribution to the discussion of Paul's thought, the extent to which he followed conventional lines in his discussion of the external events of Paul's life is astonishing. His failure to consider critically many problems of detail, such as the Galatian question, partition theories regarding II Corinthians, Philippians, and Romans, the placing of the "prison letters" at Ephesus, and the conference of Acts 15 at Jerusalem, marks the book as semipopular; likewise his use of secondary and not-too-recent works. Paul's remark that he was personally unknown to the Christians of Judea until long after his conversion is scarcely definitive evidence that he had never previously been at Jerusalem. More attractive is Guignebert's parallel but undemonstrable hypothesis that Paul received his Christian tradition chiefly from the Christians whom he persecuted at Tarsus, Antioch, and Damascus. He is certainly right in denying to Paul the sole honor of reinterpreting primitive Christianity. His discussion of Paul's conversion and of "the Pauline Mystery" is excellent.

It is most unfortunate that he was unable to complete the book. He surely would have discussed the blatant contradiction between Paul's Jewish eschatology and his Hellenistic mysticism. However emphatically anyone may differ from Guignebert and Klausner on many points, the fact is highly significant that two scholars so different in their critical and religious presuppositions agree on the central thesis that Paul's Christianity was totally un-Jewish in character and diverged sharply from the religion of Jesus. That fact illuminates the subjective and emotional character of the recent Neo-Orthodox reaction toward Reformation theology, which follows Paul rather than Jesus.

In view of the political situation in France in 1943, it is remarkable that the new publisher of the series was able to produce so excellent a book. It has the familiar dull-orange cover; its clear white paper is of even better quality than those from before the beginning of the war, better than American and British books of 1943. It is one of the welcome anomalies of the recent war that the production of such works could be continued.

PACIFIC SCHOOL OF RELIGION C. C. McCOWN

L'ARCHITECTURE NORMANDE, by Marcel Anfray.  
Pp. xii+424; 62 figs.; 56 pls. Auguste Picard,  
Paris, 1939.



*L'architecture Normande* is somewhat misleading, since the sub-title, *son influence dans le Nord de la France aux XI<sup>e</sup> et XII<sup>e</sup> siècles*, indicates the actual purpose of the book. The chapters devoted to the separate elements of Norman architecture are largely descriptive. They summarize opinions and evade the many interesting issues regarding the origin and evolution of the Norman style. Because these chapters were primarily written to establish a basis of departure for the sections which follow, no new light is shed upon the dates of Norman vaults, the purpose of nave shafts, the question of whether any of the Norman naves were originally intended to be vaulted, the priority of the English rib-vault and the reasons for sex-partite and pseudo-sex-partite vaults at Caen.

At the same time, the other chapters which trace the diffusion of Norman tribunes, façades, towers, rib-vaults and ornament tend to suffer from the descriptive approach. Without any critically established criteria by which to distinguish clearly between Norman influences and those of the other centers of Romanesque architecture in France, everything upon the exterior and interior of such churches as those of Morienval, Saint-Germer, Saint-Denis, Noyon, Laon and Notre-Dame-de-Paris, which resembles an earlier Norman example, must be accepted as proof of Norman derivation. This, however, is not an entirely satisfactory method of proving the readily granted importance of Norman Romanesque in the complicated evolution of Mediaeval architecture.

The hundred odd half-tones, which make up the 56 plates, are of exceptional quality and add greatly to the value of the study. Some reference, however, to these plates in the text would have made the task of following the descriptive presentation much easier. Also the addition of more plans, sections and comparative line-cuts would have added to the clarity of the text. After waiting impatiently for the long intellectual black-out to be lifted from French scholarship, this reviewer was disconcerted by what he felt to be the intellectual complacency of this serious study. The fact that the book was published in 1939 does not justify the omission of *all* German studies on Mediaeval architecture from the two hundred and twenty-one items in the bibliography. Undoubtedly the reviewer has been over-critical, perhaps because he felt that the one French Romanesque style of architecture which has had to pay the greatest price for the liberation of Europe de-

served a more distinguished treatment.

PRINCETON UNIVERSITY E. BALDWIN SMITH

LE QUARTIER DES MANGANES ET LA PREMIÈRE RÉGION DE CONSTANTINOPLE, by R. Demangel and E. Mamboury. Pp. ii+167, figs. 212, pls. xiv. Paris, E. de Boccard, 1939.

This long awaited book, the second fascicule of the *Recherches Françaises en Turquie* initiated in earlier years by Demangel's *Le Tumulus dit de Protésilas*, comes to hand as a striking illustration of the effects, both good and bad, which two world wars have produced in archaeological discoveries and their subsequent publication. In this particular instance the initial discovery which led to the more or less systematic study of the Mangana area resulted from the need of the French occupation forces at Constantinople in June of 1921 to provide a suitably cool storage place for the stocks of wine reserved for the troops. In searching for an appropriate "cave" in the Gulhané region the supply officers, having noted certain ruinous vaulted substructures, began to clean them out and prepare them for use as storage vaults. The importance of the structures was soon realized, however, and the excavations undertaken which gave rise to the present volume. Yet these researches, carried on under difficult conditions and in a military atmosphere quite different from that of a conventional dig, could not prove entirely satisfactory. This fact is recognized by Demangel, who rightly guards himself against the charge of incomplete investigation and hasty methods by insisting in his foreword on the limitations under which he was forced to work. Yet despite the earlier piecemeal publication in learned periodicals of most of the significant material comprised in the present volume, there seems to be less excuse for the extremely retarded appearance of the latter. Issued on the eve of World War II, it has suffered the further disadvantage of half-a-dozen years' delay in reaching the hands of interested scholars on this side of the Atlantic.

The Gulhané excavations were accomplished in three successive campaigns, from early June of 1921 to September 25, 1923, when permission to continue the investigations was refused by the Turkish authorities upon the final withdrawal of the French occupation forces. In October of 1933, however, the investigators returned for a brief period of digging in an effort to clear up certain important problems left unresolved ten years



before. Because of the uncertain dating of many of the monuments studied, the authors have rightly followed a simple topographical scheme in presenting the results of their excavations, moving from north to south along the eastern shore of the peninsula and discussing in turn the arsenal of the Mangana and its walls, the monastery of St. George and the adjacent Mangana palace, the church of St. Saviour and its hagia, and finally the general region of the monastery of the Hodegetria with its striking remains of the baptistery of St. Mary. The volume is completed by two appendices, the first a catalogue of objects discovered in the cisterns, and the second a study of the famous tenth-century marble relief of the Virgin now in the Constantinople Museum. But perhaps its most important contribution is topographical, the establishment of a carefully drawn and adequately documented plan of Region I of Byzantine Constantinople, a section which, up to the time of the present study, had remained among the most obscure and controversial of the ancient capital.

The Mangana or arsenal was established by Constantine at the eastern foot of the ancient acropolis of Byzantium and occupied the long and comparatively narrow strip of territory between it and the shore of the Propontis. The area began at a point ca. 350 m. south of the tip of the peninsula and extended thence southward for approximately the same distance, its exposed shore line protected by the powerful seaward walls of the city. As in the other maritime defenses, the ramparts here are well preserved and consist of a single massive curtain, flanked at short intervals by projecting rectangular towers, crenelated and pierced by loopholes. Although the foundations date to the time of Theodosius the Younger (408-450) and even earlier, the greater part of the work is assigned, on the basis of several inscriptions still in place on the towers, to the extensive restorations carried out by Theophilus four centuries later (829-842). In addition to extant Turkish portals the existence of several blocked gates of the Byzantine period are noted and a very plausible theory is advanced for the identification of the famous Mangana Tower, that which served as the European anchor for the chain of Manuel Comnenus, crossing the strait at this point and protecting the entrance to the Golden Horn. According to Demangel's theory this tower is the one some fifty meters south of the Turkish gate of Deirmen Kapu rather than that just north of it

as proposed by earlier topographers. Of the Mangana proper, i.e., the arsenal itself, few traces were found because the area within the walls was not systematically excavated. It seems probable, moreover, that its buildings were never of monumental scale or fortress type but rather a considerable group of lightly constructed warehouses, the function of which was nevertheless sufficiently important to give its name to the entire First Region.

The church and monastery of St. George of the Mangana is generally considered a foundation of Constantine Monomachus (1042-1054). Enlarged and enriched in the following century, it maintained its importance as a place of pilgrimage down to the Turkish conquest but was thereafter levelled and its area converted into gardens for the Serai, receiving the poetic name of Gulhané, "rose city." The extant substructures were further damaged in 1871 by the cut for the railway, and the general region is now occupied by truck gardens which are watered from the vast cisterns above which the church and monastery were erected. It was upon these substructures, beginning ca. 150 m. south of the Mangana Tower and extending thence southward ca. 200 m. on both sides of the railway, that the French excavations were centered. The cisterns conform to the usual Byzantine type, made up of series of aligned rectangular compartments each covered by a domical vault in brick carried on pendentives and supported by lofty and massive cruciform piers connected by arches. The complex and remarkably impressive aspect of these dark, echoing subterranean reservoirs is difficult to grasp for one who has not had the opportunity of seeing them at first hand, yet in most instances their general plan is relatively simple. This holds true for the St. George substructures, where the northern third of the mass forms a cube nicely adjusted to support at ground level what was once a typical eleventh-century church of the characteristic five-domed cross-in-square plan. This church of St. George was entered from the west through a narthex fronted by a walled atrium at the center of which stood what was probably an octagonal baptistery. The southern two-thirds of the substructures, accurately aligned with those of the church, obviously supported the adjacent monastery, but the traces of its superstructure are too scant to warrant even a conjectural restoration. Apparently connected with the monastery were two other buildings, a large rectangular cistern



situated ca. 100 m. to the west, and a more important complex adjoining it directly on the south. These latter substructures, called by the excavators "les Voûtes dites de la Vierge" because in them was discovered the life-sized marble relief of the Virgin, are composed of three huge parallel vaulted chambers of unequal dimensions, the central one terminating in an apse to the south. At ground level the apse was cut by a doorway fronted by a portico of two columns, within and in front of which were uncovered a number of tombs of later date. Just to the east of "les Voûtes" another complex group of substructures, for the most part inaccessible because overrun by the railway line, are conjectured to be the remains of a church of the Panachrantos mentioned by Stephen of Novgorod and other Russian pilgrims. A few meters south of "les Voûtes" lies another imposing subterranean ruin, unquestionably the remains of the splendid Mangana palace constructed for his own use by the founder of the Macedonian dynasty, Basil I (867-886). Abandoned at the middle of the twelfth century when the imperial residence was removed to the less exposed Blachernae region, it was finally razed to the ground by Isaac II Angelus (1185-1195), who transferred many of its fine marbles and monolithic columns to the newer palace on the protected shores of the Golden Horn. The extant substructures, again designed as a huge cistern made up of many domed and vaulted compartments, form a massive rectangle ca. 60 m. long by 40 m. wide laid out on a generally basilical plan. Their chief interest however resides in certain peculiarities of structure of which the most notable is the use of hundreds of large amphorae as filling above the extradors of the spherical vaults which cover the thirty-odd compartments of the building's central nave. Their purpose, as in analogous instances at Ravenna and Rome, was obviously that of lightening the total weight to be carried by the supporting vaults and arches.

Across the railway line to the east of "les Voûtes" and the monastery of St. George lies another complex of substructures built partly in and on the city walls and identified as the remains of the church and monastery of St. Saviour Philanthropos. Here the most remarkable feature, a huge triple-bayed portal opening directly to the shore and apparently breaching the ramparts themselves, once gave access from the east to a lofty three-aisled vaulted chamber beneath the church. But, since this chamber had no exit on the

landward side, it is conjectured to have served merely as a shelter for the pilgrims who flocked to a sacred spring located ca. 50 m. south along the shore, a spring now identified as the oft-mentioned hagiaσμα of the Saviour. The definite localization of the latter in the ruins of a Turkish structure, the Indjili Kiosk or "Pearl Pavilion," supplied the key which made possible the identification of all the monuments of the Mangana region discussed in the present volume, while the architectural remains of the hagiaσμα itself and its tiny subterranean chapel are of unusual interest.

Beyond Indjili Kiosk the city walls continue due south along the shore ca. 400 m. to the Gulhané lighthouse, displaying in their course an imposing series of towers (of which some are dated by inscriptions), redoubts, gates and posterns, which clearly indicate that this southern portion of the Mangana region must once have been occupied by important structures whose remains still lie undisturbed beneath the omnipresent truck gardens. A walled up portal some 200 m. south of the Kiosk is identified on somewhat tenuous grounds as the gate of the Hodegetria, and a fine columnar cistern ca. 250 m. inland and to the west of the latter is also described. But by far the most important discovery in this area consisted of the remains of a remarkable building of central plan situated about midway between the gate and the cistern and ca. 400 m. due east of Hagia Sophia. The substructures uncovered, which form only a part of a much larger ensemble, presumably a monastery, belonged to two contiguous buildings laid out on a single axis—a great hexagonal-lobed rotunda, and a semicircular porticoed atrium with ten columns which fronted the former on the northwest. Five sides of the central rotunda were broken out into monumental apses while the sixth served as the main entrance from the columned atrium. The building, which must have been covered by a dome carried on the buttressing apses, had a maximum interior diameter from front to back of 20.75 m., with the eastern apse serving as sanctuary. The four other apses each opened through a lateral doorway to small circular or hexagonal chambers symmetrically placed between the five conches and used for certain purposes in which water played an important part, as is evidenced by extant conduits. These last are explained by the discovery, at the middle of the area beneath the central dome, of a large sunken basin—or rather two such, one above the other and of successive periods—



obviously the central feature of a baptistery or hagiaσμα. The earlier basin, built of brick and forming on plan a rounded structure made up of eight apsidal lobes, was overlaid at a subsequent date by a larger six-lobed basin of magnificent Proconnesian marble slightly off center, its two lobes on the main axis broken to accommodate steps descending to the central sunken area, the other four closed off by slabs and served by conduits so that each became a semicircular font or basin accessible from the lower central space to which the steps led down. The six-lobed marble piscina is not exactly superposed upon the earlier basin of brick although its axis lines up with that of the semicircular atrium which fronts the baptistery on the west. On the basis of archaeological, literary and topographical evidence too complex and detailed to be summarized here, Demangel constructs a fairly convincing argument for the identification of the Gulhané baptistery as none other than the famous hagiaσμα of the Virgin, often visited by royalty and pilgrims of humbler rank and consecrated to St. Mary Hodegetria.

Of the two appendices to the volume the first gives a scholarly and well organized catalogue of the objects discovered in the Gulhané excavations, listing first the architectural and sculptural fragments and then the decorative (bits of fresco and mosaic), the ceramic (with one color plate), and the epigraphical (including many monograms from vases, amphorae stamps, etc.). Several of the figured capitals and other architectural elements are fine pieces of considerable intrinsic interest and the value of the catalogue itself is greatly enhanced by its copious illustrations. The volume is brought to a fitting close by a discussion of the life-sized orant Virgin of Gulhané, a unique masterpiece of eleventh-century relief sculpture in marble. The dignity, simplicity and distinction of this standing frontal figure of the Virgin, cast in the traditional pose of the Blachernitissa, are unmistakable, despite the unfortunate loss of the head, left hand and lower extremities, and serve again to demonstrate the peculiar effectiveness in the hands of a master of what have too often been considered the limiting conventions of Byzantine art. By no means the least interesting feature of the relief is the fact that the palm of the raised and gloved right hand is pierced from front to back of the slab by a cylindrical cutting from which once seems to have issued a thin jet of holy water, perhaps supplied from the hagiaσμα of the Saviour and thus producing a type of "miracle"

described by pilgrims in the case of similar holy icons. The soundness of this explanation in the present instance is further vouched for by an analogous but artistically inferior slab at Athens in which more elaborate cuttings for supplying the sacred fluid are unmistakably present.

Granted the unavoidably limited scope of the Gulhané excavations themselves, it seems to this reviewer that their very satisfactory presentation in the volume at hand might well serve as a model for the future publication of similar investigations in the incredibly rich field of Byzantine Constantinople. Demangel's text is clear and well documented, his theories brilliantly developed and on the whole convincing, while the numerous photographs, plus the excellent maps, plans, sections and details provided in Mamboury's well rendered plates and drawings give point and visual support to discussions which would otherwise be extremely difficult to follow. As in too many European publications however, the book is marred by the omission of index and bibliography.

COLUMBIA UNIVERSITY

EMERSON H. SWIFT

ARCHAEOLOGICAL INVESTIGATIONS IN EL SALVADOR, by *John M. Longyear, III*, with an Appendix by *Stanley H. Boggs*. Pp. 90, pls. 14, figs. 30, 5 tables, map. *Memoirs of the Peabody Museum of Archaeology and Ethnology, Harvard University*, Vol. IX, No. 2. Cambridge, 1944. \$3.75.

This report sums up the present state of archaeological knowledge in a small Central American republic rich in pre-Colombian remains, where very little scientific work has as yet been done. Longyear's investigations were carried out under the auspices of the Institute of Andean Research and financed by the Office of the Coordinator of Inter-American Affairs. The first part of the book consists of a General Introduction, a section devoted to sites of which enough is known to warrant a brief report, and a description of the results of six weeks' excavation in 1942 of one such site in eastern El Salvador. An appendix by Stanley Boggs on exploratory excavations in the same year at two sites in the western part of the country, a site list, and a summary of pottery and stone in private collections, finish the book. It has a comprehensive bibliography, a good map and plans, and excellent plates that are an especial treat in a wartime publication.

El Salvador occupies an area about 240 miles



long and 100 miles wide along the Pacific coast southeast of Guatemala and southwest of Honduras. It contains eleven volcanoes, a number of which are still active, and is divided by the Rio Lempa into a large western part, chiefly plateau, and a small eastern part, comparatively low-lying and open. Fully 80% of the country is under cultivation, producing rice and corn throughout, coffee in the west, sugar cane in the central section, and hennequen in the east. This extreme fertility probably accounts for the density of population prevalent at the present time and apparently also in the past. The European conquest of the country began with the invasion of the west by Cortes' lieutenant, Pedro de Alvarado, in 1524 and was completed by an invasion of the east in 1530. Spanish travellers' reports from the end of the sixteenth century give some account of the Indian population and their linguistic stocks, predominantly Lenca in the east, with some Maya in the west, and a strong element of Pipil, a Nahuatl language related to those of the Valley of Mexico.

The first statement concerning El Salvador's prehistory that was based on stratigraphic data was a report by Lardé in 1924 on a cultural stratum underlying volcanic ash. In 1926 Lardé and Lothrop dug at Cerro Zapote, a site in western Salvador stratified by volcanic ash. They discovered an early population characterized by hand-modeled "archaic" figurines and Usulután ware, a negative-painted pottery, followed by a late people using variations of the same figurines with plumbate, a late pottery ware, and other vessels showing Maya influence from the north and Pipil influence from the west. The only other excavation on a scientific basis was that begun in 1939 at Campana-San Andres by John Dimick and carried on by Boggs. These ruins, constructed largely of adobe blocks, show four building periods, but the pottery indicates a relatively short range of time for the whole, and shows contacts with the southern fringe of Maya influence in Copan and the Ulua Valley, and with Mexico.

To expand and clarify the archaeological picture extensive reconnaissance and widespread test-digging are needed rather than intensive excavation of large single sites. Outstanding problems are first, a definition of the early cultural stratum characterized by Usulután ware, presumably native to eastern El Salvador, then the question of

relations with the southern Maya, a force in the western part of the country, and that of Mexican influence, known to be marked and of long duration in the same section. Architecture, stone sculpture, and pottery all need typological and stratigraphic study to determine not only the pre-Columbian history of the country but its relations with the peoples from Mexico to Panama with which it was connected by trade routes.

Two of the three sites dug, Los Llanitos in the east and Tula in the west, were small one-period sites, dated relatively late on the basis of pottery contacts with known Maya ceramic sequences. Tazumal, the second western site, showed evidence of at least two periods of occupation with a possible range of 500 years, but has as yet been investigated on too small a scale to throw much light on general problems.

Los Llanitos contributes the southernmost ball-court yet known. It was used for a game played with a solid rubber ball and popular from Salvador north to Arizona and east to Puerto Rico. There are accounts of such a game among South American Indians, but as yet no evidence of permanent ball courts. Although the site consists of only a dozen mounds, on which stood civic and religious buildings, and residences for a few officials and priests, it was presumably the ceremonial center for about 5000 people, living in groups of a few houses, each near the fields on which grew their sustaining crops, and scattered for miles through the adjacent hills and valleys. Such an arrangement was as typical of Central American life in the past as it is today.

This paper is valuable in outlining archaeological accomplishment, background, and problems, in a little-known American country, but suffers from not being pulled together. One respects the author's desire to keep categories clear cut and avoid offending a colleague whose opinions and methods may differ from his own. None the less, both specialist and general reader would prefer one comprehensive site-list instead of two, a historical and linguistic background for the whole country instead of merely the eastern part of it, and a concluding section analyzing the progress made through work done so far in solving the problems outlined in the Introduction.

MARY BUTLER

UNIVERSITY MUSEUM, PHILADELPHIA